NATIONAL HEALTH SERVICE CORPS EDUCATIONAL PROGRAM FOR CLINICAL AND COMMUNITY ISSUES IN PRIMARY CARE

ADOLESCENT PREGNANCY MODULE

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SUBTOPIC 1

ADOLESCENT PREGNANCY PREVENTION

TIMELINE (50 minutes)

5 min	Introduction/Ice Breaker
5 min	Review of Objectives
10 min	Overview
25 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

This case, which is best suited to students or trainees, can also be used with nurse practitioners, certified nurse-midwives, physician assistants and physicians. It provides an overview of the antecedents of teen pregnancy, reviewing both developmental and psychosocial issues. The case contains some adolescent slang, which can be omitted at the leader's discretion.

By the end of the discussion, participants should be able to:

1. All Trainees: List five characteristics of an adolescent patient that would make you concerned that she or he may become a teenage parent. Also, list five characteristics that would make teenage parenthood seem less likely.

2. Students: Explain how the three stages of adolescent psychosocial development influence the sexual behavior of early, middle, and late adolescents.

3. Residents: Explain confidentiality to an adolescent and her or his parent(s).

SECTION 2 OVERVIEW

Annually, more than one million young women under 20—one out of every 10 American teenage girls—become pregnant. Teenagers from minority backgrounds and those living in poverty are more likely to become pregnant than are others. At particularly high risk are young adolescents who mature physically sooner than their peers and initiate sexual activity before they develop the cognitive maturity to think about the consequences of their behavior. Also at higher than average risk for teen pregnancy are adolescents who:

- Have boyfriends two to three years older than they are
- Are failing in school or have dropped out of school before high school graduation
- Have no future-oriented career goals
- Are or have been victims of sexual abuse
- Engage in deviant social behaviors (such as drug and alcohol abuse)
- Do not mind the idea of becoming a teen parent
- Have many friends and relatives who are or were teen parents
- Live in single-parent households or with friends or relatives
- Express concerns about their fertility

Studies suggest that many teen pregnancies are planned, or at least not unplanned, by young people seeking to validate their maturity in social environments in which adult roles other than parenthood are perceived to be inaccessible.

International studies indicate that American teens are more likely to become pregnant than those in most other developed countries. A teen growing up in the U.S. is twice as likely to become pregnant as one growing up in Canada, France, or England, three times more likely than a teenager growing up in Sweden, and seven times more likely than one in the Netherlands. This is probably because teenagers in the U.S. are not encouraged to, and therefore do not, use contraceptives as effectively as their European counterparts. American society is ambivalent about expressions of sexuality. Many parents are afraid to teach their children about sex and project these fears onto school boards, contending that sex education causes teenagers to become sexually active.

The primary health care provider can intervene by teaching parents and children about their sexuality and helping adolescents make active, informed decisions about when and with whom they will become sexually active as well as when they will become pregnant, parents, and spouses. Teens also need to be helped and encouraged to assume responsibility for preventing pregnancy and sexually transmitted diseases. It is often helpful to initiate these discussions about the stages of sexual decision making before the teen becomes sexually active. Pre-teens, teens, and their parents may be more receptive to these discussions if you start from the premise that life-long abstinence is neither a reasonable nor a desirable goal and point out that adolescent sexual activity need not be synonymous with reproductive morbidity. Parents and teens need to understand that the prevalence of out-of-wedlock births, sexually transmitted diseases and genital carcinomas has not risen in tandem with the prevalence of sexual activity among teenagers in Europe, Scandinavia, or Japan.

While it is important that all teenagers be given the requisite information about contraception, abortion, adoption, and parenting, health care providers should remember that social taboos make it very difficult for most families to discuss these issues openly.

With younger adolescents (10– to 14–year–olds) and their parents, the main theme should be reassurance. Teenagers should be reassured that the changes they are noticing in their bodies and emotions are a normal part of development. Their parents should be reassured that their children's interest in sexual issues is normal and should be encouraged; they should also be helped to set appropriate limits on their children's exploratory sexual behavior.

With middle (15– to 17–year–olds) and late (18– to 20–year–olds) adolescents and their parents, the main theme should be responsibility. Teenagers should be encouraged to take responsibility for their dating and sexual behavior; adolescents who have initiated or are contemplating initiating sexual activity should be encouraged to consider the risk of pregnancy and sexually transmitted diseases, and should be given the knowledge and means necessary for preventing both. The parents of middle and late adolescents should be encouraged and helped to allow their children to assume responsibility for their own behavior in all facets of their lives.

When approaching the adolescent contraceptive patient, it is important to bear in mind that only a minority of American teenagers seek contraception in anticipation of first intercourse. Because most teens will have been sexually active for a period of time before they seek professional help, it is usually instructive to begin by asking the patient why she decided to seek a prescription contraceptive at this time and why she has delayed until now. Responses to these questions will enable the clinician to develop a differential diagnosis for those non-contracepting, sexually active teenagers who insist that they do not want to be pregnant "any time soon" (see Handouts 1 and 2), which, as the case presented in this module illustrates, is a crucial first step in providing contraceptive care to teens.

Only a minority of American teenagers cite lack of knowledge and access as the primary reason for their failure to use contraceptives. This is a tribute to the success of school-based sex education programs and the proliferation of affordable family planning clinics. Unfortunately, knowledge and access do not guarantee use. Unsafe sexual practices persist because teenagers are either unwilling, unable, or afraid to use their knowledge to make conscious decisions about their reproductive behavior. Most teens still describe their first sexual encounter as something that "just happened" and explain their failure to use contraceptives by saying, "I just didn't get around to it." This is undoubtedly because little progress has been made toward overcoming the following:

- Guilt experienced by teens when they violate social taboos prohibiting premarital sex
- Fear of contraceptive side-effects, parental discovery, and the pelvic examinations
- Sense of invulnerability that permeates all cognitive process at this age; adolescents who do not use birth control for a period and do not become pregnant may become resistant to the use of contraceptives; some feel immune to pregnancy, whereas others worry they may be sterile
- Litany of reasons that many American teenagers "don't mind" or "want to" get pregnant

- Abusive relationships with older partners who refuse to use contraceptives

Finally, primary health care providers should remember that a high index of suspicion may be needed to avoid missing the diagnosis of pregnancy in the adolescent; first trimester vaginal bleeding occurs in more than a third of cases. Therefore, when pregnancy is suspected, inquiries should be made about the following:

- Date and normality of the last menstrual period
- Date of last unprotected sexual activity
- Contraceptive use
- Classic symptoms of pregnancy (for example, breast swelling and tenderness, morning nausea, and weight gain)
- Nonclassic symptoms (fatigue, headache, abdominal pain, and irregular or scant menstrual bleeding)

Providers should remind their patients that home pregnancy tests are not a replacement for a visit to the health care provider. They should also urge adolescents not to let home pregnancy tests delay them from seeking professional diagnosis and care, regardless of the test results. Home pregnancy tests are not inexpensive, they are not as reliable as those used in health care facilities, and they can be confirmed by another test performed by a health care provider.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Alexis is an adolescent female brought to your office by her mother for a pregnancy test. As you approach them, the girl begins to look familiar. You realize she is the sister of one of your 16–year–old obstetric patients, Tyra. You glance at the birth date on the medical record—only 13–years–old—and remember Tyra was worried because her sister had been skipping school and hanging out with older kids, most of whom already had children and had dropped out of school.

You usher Alexis and her mother into an examination room and ask Alexis why she came, but her mother answers with an angry account of her daughter's recent behavior: "She spends her life in the bathroom doing her hair or talking on the phone about boys." The mother explains that yesterday, when Alexis should have been in school, she spent the day with the 18–year–old boy next door. "She knows she isn't allowed to date until she is 18," the mother says. "I've warned her, if she gets pregnant...."

You acknowledge that it is difficult to raise teenagers and suggest that you and she spend some time discussing her frustrations privately. You explain that you would like to see Alexis alone and that the three of you will meet together when you have finished examining her. You warn Alexis' mother that you will be able to share only the information Alexis agrees to, unless she mentions something you feel could be life-threatening, such as suicide. Before Alexis' mother has a chance to protest, you remind her that you would be happy to spend some private time with her as well, discussing her concerns about her daughter. Alexis' mother departs for the waiting room mumbling, "When I was her age, the doctor told my mother I was pregnant..."

Alexis looks frightened and says her last period just ended – two weeks ago. She admits she spent the day with the boy next door, but denies having had sexual intercourse with him and says, "I never even took my pants off the whole way. It hurt too much. I got scared and made him stop. I never really wanted to do it. All my friends were talking about what they had done with boys. I was embarrassed to still be a virgin, but I really only wanted to see what he looked like, what it would be like. I'm not pregnant, am I? It was the safe time of the month, right?"

You ask Alexis to go to the bathroom, collect a urine sample, and then return to the examination room and undress for a physical and pelvic examination. You return to the examination room to announce to Alexis that she is not pregnant. You notice a flicker of disappointment, but she quickly replaces the look with a smile.

1. If you think her mother will object, why do you want to see Alexis alone?

2. Is Alexis' behavior most characteristic of an early, middle, or late adolescent?

3. Should you do a physical examination if Alexis' pregnancy test was negative?

4. Are you surprised that Alexis looked disappointed that she wasn't pregnant?

5. Do you think it would be helpful to discuss other topics (for example, school, future career plans, and aspirations), even though they are not directly related to her chief complaint?
6. What type of contraceptive would be most appropriate for Alexis?

SECTION 4 SUGGESTED ANSWERS

1. *If you think her mother will object, why do you want to see Alexis alone?*

Teenagers are often reluctant to be completely candid with health care providers for fear that the information they share may be transmitted to their parents or some other authority figure. To obtain important information and manage care effectively, providers must assure adolescent patients of the confidentiality of their communications. It is helpful to begin the interview by explaining to both the teenager and the parent(s) that two meetings will take place—one with the teenager alone and one with the parent(s) and the teenager. The option of a third meeting for parent(s) and provider should also be offered.

It is critical that both the teenager and the parent(s) understand that whatever the teenager discusses with the provider is confidential—it will not be shared with others unless the teenager agrees. They should also understand that if the provider thinks the young person is mature enough to give informed consent for treatment, she or he can receive treatment for medical conditions related to sexual activity without parental permission or knowledge. Because confidentiality places responsibility for the minor's welfare on the provider, it is always wise to reserve the right to tell someone else if the teenager mentions a potentially life-threatening problem. This proviso maximizes the provider's ability to treat disturbed teenagers effectively and is often reassuring to parents.

Most parents do not have trouble understanding the importance of separate, confidential visits for their teenagers. However, professionals should be prepared to deal with the anger of parents who are having trouble letting their children become autonomous adults. These parents come across as overbearing. They often answer questions directed at their children, feel that they have the right to know everything, and discipline their children by issuing decrees designed to restrict the opportunity for undesirable behavior rather than teaching the teenager about the disadvantages of those behaviors.

The provider can facilitate communication between parents and teenagers by modeling appropriate communication styles and encouraging parents to teach their children to make responsible decisions by giving them the opportunity to choose between behaviors and activities that are acceptable to the parent, rather than simply proscribing a behavior. For example, offering a 16–year–old the choice between getting home from a party by 10:30 p.m. and being picked up by the parent at the party at 11:00 p.m. is preferable to stating that he or she is to be home at 10:30 p.m. because it gives the teenager the feeling that he or she is making a choice but doesn't jeopardize parental authority.

Fortunately, as long as an effort is made to make the parent feel included, only a minority of these angry parents refuse to allow their teenagers to be treated. The importance of giving parents ample opportunity to discuss their concerns and feelings should be underscored; parents who feel left out may sabotage treatment plans.

2. *Is Alexis' behavior most characteristic of an early, middle or late adolescent?*

Adolescent psychosocial development is divided into three stages:

- Early adolescence: ages 12 to 14, or roughly the junior high school years
- Middle adolescence: ages 15 to 17, or roughly the high school years
- Late adolescence: ages 18 to 20, or the early post-high school years

Individual differences in the rate of development make these chronological distinctions far from absolute. Most health care providers find that the stages of adolescent development are best distinguished by their characteristic developmental tasks and behavioral styles.

Alexis' behavior is typical of the behavior of an early adolescent for whom the major developmental task is achieving comfort with a changing body image, and the major question is, "Am I normal?" Because early adolescent psychosocial development is heralded by rapid physical growth, young people at this stage of development are often preoccupied with their appearance and spend a great deal of time examining their bodies. They often compare their bodies to those of their peers and express anxieties about their somatic and sexual development by discussing sexual issues and telling sexual jokes. Their intense interest in the size and shape of their breasts and penises may make the early adolescent seem self-conscious and narcissistic to the adult provider.

Most early adolescents have an undifferentiated sexual identity—neither homosexual nor heterosexual. They rarely relate to others on an intimate level, and their sexual explorations may be directed inward or toward other young people of the same or opposite sex. Because sexual activity, when it occurs, is usually engaged in for nonsexual reasons of the sort Alexis mentioned—the desire to obtain peer approval or to explore a newly formed body part—parents should be reassured that same-sex play at this stage of development does not herald future homosexual orientation. Health care providers should be aware that pregnancy at this stage may be the unwanted consequence of normal exploratory behavior or an expression of the ambivalent feelings that many early adolescents like Alexis have about independence.

Achieving increased autonomy and developing an adult identity are the major developmental tasks of middle adolescence, and "Who am I?" is the major question these young people ask. The middle adolescent has already experienced the majority of her or his physical growth and development; most accept their adult body and reproductive capacity. As peer group allegiances supplant family ties, this tumultuous stage of development is marked by autonomy, conflict with authority, testing limits, and experimentation. Experimentation with adult behaviors and roles allows middle adolescents to explore their potential, but many are cognitively encumbered by feelings of personal omnipotence and the personal fable "It can't happen to me." Such feelings protect the middle adolescent from considering undesirable consequences and outcomes, fostering egocentricity and grandiosity that result in certain risk-taking behaviors as they try to prove themselves to their peers. If Alexis were a middle adolescent, she would probably not have admitted that

she got scared. In order to recognize deviant development and behavior, the health care provider should realize that at this stage of development, sexual activity is usually directed toward members of the opposite sex, individual dating is often initiated, and pregnancy often may be an effort to achieve autonomy, independence, peer group approval, or establish an adult identity.

During late adolescence, achieving a stable adult identity is the major task, and the major question is "Who am I in relation to other people and the future?" Late adolescents are more like adults in thought and behavior; pregnancy may be an effort to solidify a relationship or define a social identity.

3. *Should you do a physical examination if Alexis' pregnancy test was negative?*

Although the diagnosis of pregnancy can be made or excluded without examining the patient, a physical examination is important for diagnosing and treating concurrent sexually transmitted diseases and excluding other causes for the adolescent's symptoms. It also provides an excellent opportunity for teaching adolescents about their bodies and dispelling myths about "safe times of the month." For this reason, many health care providers and clinics do not provide pregnancy testing or contraception without an examination. However, a strict policy of this type can discourage teens who are afraid of being examined from seeking care. Thus, providers should be aware that even though it is preferable to perform a pelvic examination in these circumstances, studies show that postponing the examination and providing two to three months of contraception is an acceptable alternative for low-risk teens (for example, those who do not have any symptoms of lower genital tract pathology, those who have never had a sexually transmitted disease or abnormal Pap smear, and those who have not had multiple sex partners).

4. *Are you surprised that Alexis looked disappointed that she wasn't pregnant?*

When interviewing teenagers, it is extremely important to pay attention to their non-verbal communication. Young people who look slightly disappointed when they are told they are not pregnant should be carefully questioned about hidden agendas. Teens who have been sexually active for some time without conceiving may become quite resistant to the idea of using contraception. Some are convinced that the techniques they have been using (typically withdrawal or rhythm) are effective, whereas others may fear they are sterile. Other teens may have serious home, peer group, or school problems they hope to avoid through pregnancy. These issues must be addressed and alternative, more adaptive solutions to these problems must be found if pregnancy is to be avoided. Alexis would probably refuse to discuss birth control; her mother's hard line on sexual activity may make it impossible for her to acknowledge her own sexuality and entertain the possibility of future sexual relations. Although Alexis must be given information about contraception, it will be most productive to preface the discussion of contraceptive options with a discussion of the causes of her failure to use contraceptives consistently to date. Building this

discussion around the differential diagnosis presented in tabular form in this module will enable the clinician to overcome major barriers to contraceptive use she has encountered.

5. *Do you think it would be helpful to discuss other topics (such as school, future career plans and aspirations), even though they are not directly related to her chief complaint?*

In addition to directing contraceptive counseling at specifically identified risk-factors for non-compliance, it is important to address factors known to bolster contraceptive vigilance; that is, to promote the type of future-oriented career planning that makes teens want to postpone childbearing because they have options that are more attractive than immediate parenthood. Providers need to remember that young people need motivations and opportunities as much as they need contraceptive services to avoid pregnancy. Offering confidential reproductive services will undoubtedly help motivated teens prevent the consequences of unprotected sexual activity but may not help those who are failing in school or those who grow up in disadvantaged environments in which early parenthood not only entails little in the way of lost opportunities, but is actually regarded as a culturally and socially acceptable means of achieving adult status. Because these young people typically have little immediate interest in obtaining or utilizing contraceptives, conversations about contraceptive options are often extremely frustrating (these young people invariably have a myriad of reasons that make it impossible for them to use any of the available contraceptive methods). To avoid being backed into the paradoxical position of agreeing that the teen "can't use birth control," it is preferable to begin the conversation about contraception by helping the teen consider alternative ways of meeting her developmental needs. Avoid discussions about contraception with teens who aren't ready to listen.

Because many (if not most) sexually experienced adolescents engage in other health-risky behaviors, contraceptive counseling for this age group must, at a minimum, include a confidential discussion of common co-morbidities (see table included in this module) and a clear plan for dealing with minors who have sexually transmitted diseases, are pregnant, and are involved in health-risky or illicit behaviors.

6. *What type of contraceptive would be most appropriate for Alexis ?*

When it has been established that a teen is prepared to listen to, and is able to utilize, contraceptive information, the next step is to help them select the method(s) that best fits their needs for ease and safety of use and efficacy at preventing pregnancy and sexually transmitted diseases. Health care providers should remember that a poorly fitting method (one that does not match the teenagers' needs) will not be used. Because the contraceptive methods that are most effective for preventing pregnancy (for example, the hormonal methods) afford the least protection against sexually transmitted diseases (and visa versa), it is usually necessary to evaluate the risks of unintended pregnancy and infection separately when helping patients select the most appropriate method. To maximize protection against morbidity, couples who are not mutually monogamous should be advised

to use two methods. Because teens often have trouble remaining vigilant about the use of contraceptives, the most effective protection against pregnancy and sexually transmitted diseases is apt to be provided by Norplant, DepoProvera, or oral contraceptives in conjunction with a latex condom.

While it is important to avoid being paternalistic and judgmental when counseling teens, it is equally important not to be afraid to offer an opinion. Counseling that is too tightly guided by ethical concerns about the preservation of individual rights can deprive patients of the very information and guidance they need to make wise medical choices. In short, providers should not let their desire to be perceived as caring and informative interfere with the need to help young patients make informed decisions.

Oral contraceptives remain the most popular prescription method of contraceptive at this age. A wide variety of combination oral contraceptive preparations are available in the U.S., all of which contain one of two estrogens (ethinyl estradiol or mestranol) and one of seven progestins (ordered by decreasing androgenicity: norgestrel, levonorgestrel, norethindrone, norethindrone acetate, ethynodiol diacetate, norgestimate, and desogestrel); formulations that contain only progestin are not usually recommended to teenagers because they are less effective and cause more irregular uterine bleeding. Clinicians should be sufficiently familiar with the differences between various formulations so that they can make therapeutically logical changes when side effects persist or begin to threaten compliance. Emphasizing the non-contraceptive health benefits associated with oral contraceptive use may improve compliance, as many of these features are particularly attractive to adolescents (see Handouts 1 and 2).

Unfortunately, the episodic nature of sexual relationships at this age makes it difficult for most adolescents to maintain the high level of contraceptive vigilance needed to use oral contraceptives consistently and effectively. Teens tend to discontinue use of oral contraceptives when one romantic relationship ends (as they perceive no immediate need for contraceptive protection) and most fail to resume contraceptive use when they enter the next relationship. The result is unacceptably high failure rates among adolescent users.

The risk of unintended pregnancy can be significantly decreased by encouraging teenagers to use one of the longer acting hormonal contraceptive formulations (the implant or injection). Continuation rates for both Norplant and DepoProvera are better than for oral contraceptives and barrier methods, making them the most cost-effective methods on the market. One study showed that only 5% of teen Norplant users discontinue use and only 2% get pregnant during the first year, whereas 66% of oral contraceptive users discontinue use and 38% become pregnant. Although continuation rates for DepoProvera are poorer than those for Norplant (only 44% of teen DepoProvera users return for a second shot and only 27% return for a third), comparative cost analyses indicate DepoProvera is less costly than Norplant unless Norplant is used for at least four years.

The intrauterine device (IUD) is rarely offered to teens because of the risk of upper genital tract infection and concerns about future fertility. However, these concerns may have been

overstated. The small increased risk of pelvic inflammatory disease associated with IUD use almost entirely is due to the insertion process and not to the device itself or the string. While it would probably be unwise to encourage most teens to use the IUD, it may be the best method for a teen mother who is in a mutually monogamous relationship, has had no sexually transmitted diseases, and has been unsuccessful with other methods.

Finally, all patients should be informed about the availability of postcoital contraception. The most widely used postcoital regimen (200 ug of ethinyl estradiol and 2 mg of norgestrel) is usually dispensed as four tablets of the oral contraceptive "Ovral": two tablets are taken within 72 hours of unprotected intercourse and two tablets are then taken 12 hours later. Other methods are also available.

SECTION 5 ADDITIONAL QUESTIONS AND ACTIVITIES

SUGGESTED ACTIVITIES

1. Select five class members to be a "panel of experts" and let the rest of the class be the local Parents and Teachers Association. Consider including a previously or currently pregnant teen in the discussion. Debate the advisability of:

- Implementing a new sex-education program at your school
- Dispensing condoms to students at school

2. Write two or three paragraphs about your own early sexual experiences and consider how your feelings may help and hamper you in treating sexually active teenagers.

SUGGESTED QUESTIONS FOR FUTURE RESEARCH

1. How do the physiologic changes that occur during puberty influence adolescent psychosocial and cognitive development?

2. What types of events and experiences foster the internal desire and motivation to postpone childbearing and pursue careers other than parenthood among impoverished adolescents?

SECTION 6 SUGGESTED READING

1. Sahler OJZ, McAnarney ER. *The Child from Three to Eighteen.* CV Mosby Company. St. Louis; 1981.
   Developmental considerations affect all phases of adolescent health care. Using a series of vignettes, the authors of this book help students and practitioners understand developmental issues and incorporate a more conscious biosocial approach into their practices. Pertinent features of specific stages in both physiological and psychological development are integrated into evaluations and treatment schemes for adolescents who have such contemporary biosocial problems as pregnancy, drug abuse, and family dysfunction.

2. Udry JR. Biological predisposition and social control in adolescent sexual behavior. *Am Soc Review* 1988;53:709–722.
   This paper discusses ways in which the physiologic changes of puberty and the psychosocial and cognitive changes of adolescence influence teen sexual behavior.

3. Brown SS, Eisenberg L. *The Best Intentions.* National Academy Press. 1995. Washington DC.
   This book explores a wide variety of family planning issues, ranging from the efficacy of various pregnancy prevention programs at the national level to the complicated web of personal and interpersonal factors that shape an individual's decisions about sex, contraception, and childbearing.

4. Spitz AM, Velebil P, Koonin LM, Stauss LT, Goodman KA, Wingo P, Wilson JB, Morris L, Marks JS. Pregnancy, abortion, and birth rates among US adolescents—1980, 1985, and 1990. *JAMA* 1996;275:989– 994.
   This paper computes teen pregnancy, abortion and birth rates over the last 15 years and demonstrates that when the denominator includes "sexually active 15– to 19–year–old females," rather than simply all "15– to 19–year–old females," the data show a steady decline (rather than incline) in the teen pregnancy rate in this country.

5. Stevens-Simon C, Lowy R. Is teenage childbearing an adaptive strategy for the socioeconomically disadvantaged or a strategy for adapting to socioeconomic disadvantage? *Arch Pediatr Adolesc Med.* 1995;149:912–915.
   This paper reviews articles published over the past decade pertaining to the educational, vocational, and socioeconomic sequelae of childbearing among high school-aged women in an effort to clarify the relationship between adolescent childbearing and subsequent educational and vocational achievements.

6. Cates W, Stone K. Family planning, sexually transmitted diseases and contraceptive choice: A literature update. *Fam Plann Perspec.* 1992;24:75–84 & 122–128.
   This paper reviews the relative efficacy of various contraceptive methods at preventing pregnancies and sexually transmitted diseases.

7. Ford CA, Millstein SG, Halpern-Felsher BL, Irwin CE. Influence of physician confidentiality assurances on adolescents' willingness to disclose information and seek future health care. *JAMA*. 1997;278:1029–1034.
This paper emphasizes the importance of confidentiality in treating teenagers.

8. Forrest J, Kaeser L. Questions of balance: Issues emerging from the introduction of the hormonal implant. *Fam Plann Perspec*. 1993;25:127–132.
Winter L, Breckenmaker LC. Tailoring family planning services to the special needs of adolescents. *Fam Plann Perspec* 1991;23:24–30.
These two papers discuss the importance of directive family planning counseling.

9. Resnick Md, Bearman PS, Blum RW, Bauman KE, Harris KM, Jones J, Tabor J, Beuhring T, Sieving RE, Shew M, Ireland M, Bearinger LH, Udry JR. Protecting adolescents from harm. *JAMA* 1997;278:823–832.
Murray-Garcia J. African-American youth: Essential prevention strategies for every pediatrician. *Pediatr*. 1995;96:132–137.
These two papers review the characteristics of adolescents who are at risk for a variety of health-compromising behaviors and the personal and environmental characteristics that protect some from harm.

10. Rainey DY, Stevens-Simon, C, Kaplan DW. Self-perception of infertility among female adolescents *Am J Dis Child* 1993;147:1053–1056.
Zabin LS, Astone NM, Emerson MR. Do adolescents want babies? The relationship between attitudes and behavior. *J Research Adol*. 1993;3:67–86.
These two papers discuss the wantedness and absence of unwantedness that are characteristic of many teen pregnancies. They will help the reader understand their teenage patients who look disappointed when they are informed that their pregnancy test is negative.

11. Armstrong K, Stover MA. Smart Start: An option for adolescents to delay the pelvic examination and blood work in family planning clinics. *J of Adol Health* 1994;15:389–395.
The data presented in this paper provide guidelines that will enable providers to postpone pelvic examinations and blood work in low-risk teenage family planning patients.

12. Trussel J, Leveque J, Koenig J, London R, Borden S, Henneberry J, LaGuardia K, Stewart F, Wilson G, Wysocki S, Strauss M. The economic value of contraception: A comparison of 15 methods. *Am J of Pub Health* 1995;85:494–502.
This paper contrasts the cost of using various contraceptive methods, including abstinence over five years, taking into account the costs associated with method use, method failure, and sexually transmitted diseases. All methods are less costly than no method for teens.

13. Hatcher RA, et al: Combined Oral Contraceptives. In: *Contraceptive Technology 1988–1989*. Breedlove B, Judy B, Martin N (editors). Irvington Publishers, Inc., (reprinted and updated yearly).

This book provides an in-depth discussion of current contraceptive methods. It is an excellent reference and an up-to-date guide to contraceptive management.

14. Stevens-Simon C. Contraceptive Care of Adolescents. *Contemporary Pediatr*. 1997;14:35–58.
This paper reviews current strategies for preventing teen pregnancies and both the art and the science of prescribing contraceptives to teenager.

SECTION 7 AUDIO-VISUAL RESOURCES

1. It Only Takes Once. 1986 (19 minutes). This program is designed to help teenagers make responsible sexual choices. It covers the gamut of options, from "just saying no" to using effective contraception, and includes testimonials from teenage parents that dispel romantic myths about parenthood. $198.
   Contact: Intermedia, 1300 Dexter Avenue North, Seattle, WA 98109, 800-553-8336.

2. Teenage Birth Control—Why It Doesn't Work. (25 minutes). The premise of this program is that most teen pregnancies occur because birth control is not used, even though teens know about it. The program is designed to help teenagers achieve insights into their emotional and psychological motivations for risk taking. Accompanying teacher's guide.
   Contact: Sunburst Communications, 39 Washington Avenue, Box 40, Pleasantville, NY 10570-9971, 800-431-1934.

3. Sex Myths and Facts. 1988 (17 minutes). This program, presented in a question-and-answer format, is designed to dispel misconceptions about sex and contraception. Wrong information is presented by teens—"I heard you couldn't get pregnant if you did it standing up"—and corrected by a male narrator. $340.
   Contact: Alfred Higgins Productions, 6350 Laurel Canyon Boulevard, Suite 305, North Hollywood, CA 91606, 800-766-5353.

4. Choosing to Wait: Sex and Teenagers. (34 minutes). This program dramatizes the stories of three teenage couples making decisions about their sexual relationships. It provides support to young people who are not sexually active and demonstrates how adding sex to a relationship changes the relationship. $199. Accompanying teacher's guide.
   Contact: Sunburst Communications, 39 Washington Avenue, Box 40, Pleasantville, NY 10570-9971, 800-431-1934.

5. Know How. Produced by: Intermedia, Inc. (1989)
   Encourages teenagers to take a long-range view of their lives and postpone early sex and parenthood.

6. Mother/Daughter Choices. Produced by: Girls Club of Santa Barbara (1988)
   Mothers and daughters discuss the differences in sexual expectations that they had growing up.

7. Birth Control: Myths & Methods. Produced by: Churchill Media (3rd Edition)
   Covers numerous forms of contraception with commentaries concerning which are the most appropriate for various couple needs.

8. Hope Is Not A Method. Produced by: Altschul Group Corporation (1993)
   Stresses the importance of condom use and presents risks and benefits of other methods.

9. Birth Control For Teens. Produced by: Churchill Media (3rd Edition)

Covers numerous forms of contraception with commentaries concerning which are the most appropriate for various couple needs.

10. Date Rape. Produced by: Intermedia, Inc. (1989)
    Helps teens formulate limits and encourages them to consider any form of forced sex rape.

11. Love In The Dark Ages. Produced by: Kids Rights (1986)
    Teaches sexual responsibility and respect for self and others.

SECTION 8 HANDOUTS/OVERHEADS

A DIFFERENTIAL DIAGNOSIS FOR THE NON -CONTRACEPTING, SEXUALLY ACTIVE TEENAGER

- **Lack of knowledge:**
  "I thought I was too young to get pregnant."
  "I didn't think I was having sex often enough to get pregnant."
  "I thought there was something wrong with me and I couldn't get pregnant."
  "I didn't know where to get birth control."
  "I thought withdrawal was good protection."
- **Denial of sexual behavior:**
  "I've only had sex once."
  "I was waiting for a closer relationship with my boyfriend."
  "Sex should be spontaneous."
  "My parents would be really mad if they knew I planned to have sex."
  "I just haven't gotten around to it."
- **Fear:**
  "I'm afraid of the side effects of birth control."
  "I'm afraid my parents would find out."
  "I'm afraid of the pelvic examination."
- **Personal Fable – It won't happen to me:**
  "My boyfriend is really fast."
  "I know when I'm fertile."
- **Pregnancy is not undesirable:**
  "I don't mind getting pregnant."
  "I want to get pregnant."
  "If it happens - it happens."
  "I want to be sure I can get pregnant."
  "I want something to love and something to love me."
  "All my friends have babies."
  "My mother says she wants to be a grandmother."
  "All women have babies, it's natural."
  "Having a baby would make me want to finish school."
  "I want a place of my own."
- **Lack of control over reproductive behavior:**
  "My boyfriend wants me to get pregnant."
  "My boyfriend won't let me use birth control."
  "I don't want to have sex but my boyfriend makes me."

HANDOUT 1

COMMON CO-MORBIDITIES AMONG SEXUALLY EXPERIENCED ADOLESCENTS

- **Sexually transmitted diseases**
- **Reproductive cancers**
- **Depression**
- **Violence**
- **Smoking**
- **Substance abuse**
- **School failure**

NON-CONTRACEPTIVE HEALTH BENEFITS OF ORAL CONTRACEPTIVES

- **Regulation of the menstrual cycles**
- **Alleviation of dysmenorrhea**
- **Improvement of acne**
- **Protection against iron-deficiency anemia**
- **Protection against benign breast disease**
- **Protection against endometriosis**
- **Protection against ectopic pregnancy**
- **Protection against ovarian cysts**
- **Protection against ovarian cancer**
- **Protection against endometrial cancer**

HANDOUT 2

SUBTOPIC 2

OPTIONS COUNSELING

TIMELINE (60 minutes)

5 min	Introduction/Ice Breaker
5 min	Review of Objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

This case, which is suitable for students or residents, can also be used with nurse practitioners, physician assistants, certified nurse-midwives, and physicians. It provides an overview of the options for managing adolescent pregnancies and emphasizes the importance of helping teenagers consider the advantages and disadvantages of each option. The case contains some slang, which can be omitted at the leader's discretion.

By the end of the discussion, participants should be able to:

1. All Trainees: Explain the risks and benefits of abortion, adoption, and parenting (the three pregnancy management options) to a teenager.

2. Students: Explain to a pregnant 13-year-old why she needs to tell her parents she is pregnant before she begins to "show."

3. Residents: Help a pregnant teenager tell her parents she is pregnant and wants to:

    - Have an abortion
    - Put the baby up for adoption
    - Keep the baby and become a mother

SECTION 2 OVERVIEW

After an adolescent is informed that she is pregnant, she should be helped to accept and understand the implications of her situation. Management options should be presented in a non-judgmental fashion; health care providers who strongly support or oppose a particular option should refer their pregnant patients to a neutral provider who can present the risks and benefits of obtaining a therapeutic abortion, relinquishing the baby following birth, or keeping and raising the infant. These options should be discussed with the adolescent in the context of her future career and family plans. The primary health care provider should be careful to emphasize that the decision to remain pregnant and the decision to become a parent are not synonymous but are two separate issues. Many adolescents need considerable support and encouragement to entertain the possibility of adoption. For more information about options counseling, see Handout 1.

Although confidentiality must be maintained, it is prudent to encourage younger adolescents to share the decision-making process with a parent or another trusted adult. Mobilizing the members of the adolescent's support network helps create an accepting environment in which the young person can explore her own feelings about the pregnancy and its consequences, secure in the knowledge of continued support regardless of her decision. Because the laws governing the right to therapeutic abortion differ from state to state, it is important for health care providers who work with sexually active adolescents to familiarize themselves with the laws in their state.

After a management decision is reached, follow-up should be arranged at an appropriate care site. Adolescents who choose to continue their pregnancies should be referred for prenatal care. The importance of early, consistent care and the ongoing possibility of adoption should be emphasized.

In addition to referring the patient for care, a mechanism should be established to ensure that the adolescent follows through with the agreed-upon management plan. Adolescents who are ambivalent about their decisions often delay or fail to implement the management plan, thus jeopardizing both their own and their unborn child's future health and well-being.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Katie, a 16–year–old mother of one, comes to the practice with her six–month–old daughter for a pregnancy test. The baby is fussy and Katie is on edge, perhaps in anticipation of the results of the test.

Katie tells you that even though she had very little contact with her daughter's father Mike during her pregnancy, he started coming around again after the baby was born. She seems happy about this and says things between them are going well. She explains that he is no longer physically or verbally abusive to her and has almost completely stopped drinking.

Although Katie says she used birth control when she left the hospital, she admits that she ran out after two months and just "didn't have time" to get a new prescription. Now she is sure she is pregnant. She has missed her period, feels like she did when she was pregnant with her daughter, and says the home pregnancy test she did last week was positive.

Katie says she has come to talk to you because she doesn't know what to do. Both she and Mike have always been against abortion, but she knows she can't raise two children alone and Mike won't be any more help with two children then he has been with one. "He just doesn't have enough patience," she says.

Your pregnancy test and examination confirm that Katie is approximately 14 weeks pregnant. She seems pleased and says she'll keep the pregnancy but promises to discuss adoption with Mike.

1. What are Katie' s options?

2. Do you think Katie or Mike might abuse one of the children if they have another?

3. Is Katie a candidate for an abortion?

4. At what point would you include Mike in the discussion?

SECTION 4 SUGGESTED ANSWERS

1. *What are Katie' s options?*
   See Overview.

2. *Do you think that Katie or Mike might abuse one of the children if they have another?*

   While there are no data that indicate adolescent mothers are at higher risk for child abuse or neglect than older mothers from similar socioeconomic backgrounds, there is considerable evidence of a delayed relationship between teenage motherhood and child maltreatment. Numerous studies have found that women who begin childbearing before they are 20 are over-represented among families reported for child abuse. Many studies suggest that chronic stress, particularly stress related to poverty and rapid repeat pregnancies, are among the best predictors of subsequent abuse. However, the results of a recent study suggest that factors such as stress, lack of knowledge, inappropriate expectation, and lack of support merely set the stage for aggressive parenting behaviors to occur and that it is the tolerance for punitive parenting practices that provides the critical ingredient in evoking physical abuse. Indeed, the results of recent studies suggest that maternal psychological predisposition for aggressive coping behaviors may help clarify why some families who do not appear to be at high risk for child abuse become abusive while other families who appear to be at high demographic risk for child abuse do not abuse their children.

   The health care provider should take into account that Katie is particularly worrisome; she has been in an abusive relationship with Mike, she exhibited little tolerance for her baby's fussing in the waiting room, and she says that Mike is also impatient. The added stress of a second child needs to be given serious consideration in counseling teenage parents about management options for a second pregnancy.

3. *Is Katie a candidate for an abortion?*

   Several abortion procedures are available; the duration of gestation usually dictates the choice of methods. Prior to the 12th week of gestation, abortion is a very low risk. Outpatient medical procedures (mifepristone or methotrexate followed by oral or vaginal misoprostol) or surgical procedures (dilation and suction curettage) can be used prior to the ninth week of gestation. Most adult patients prefer medical methods, as they afford more privacy and autonomy. Unfortunately, medical regimes often pose a problem for teenagers, as they tend to be less compliant with return appointments and may be more troubled by delayed passage of the fetus and prolonged bleeding. Between nine and 12 weeks of gestation, an outpatient dilation and suction curettage can still be performed very safely, but after that time, the procedures—dilation and extraction (12 to 15 weeks) and prostaglandin induction (16 to 24 weeks)—carry a higher risk of serious complications and are more costly because hospitalization is usually necessary for abortions performed after

the 16th week of gestation. Thus, accurate dating is critical in counseling potential abortion patients.

Because historical information about the date of the last menstrual period may be inaccurate, most clinicians rely on information gathered from pelvic examinations and ultrasound studies when dating gestations. If large discrepancies between size and dates raise concerns about the possibility of an ectopic pregnancy, quantitative serum levels of human chorionic gonadotropin (HCG) should also be obtained. The role of ultrasound in the diagnosis of an ectopic pregnancy depends on the HCG level. HCG can be detected in the serum within two to three weeks of conception at a concentration of 10 IU/L. The level doubles every 48 hours reaching a maximum of 100,000 IU/L at approximately 10 weeks and then falls to 20,000 IU/L by 20 weeks and remains at that level throughout the rest of the gestation. In a viable intrauterine pregnancy, the gestational sac usually becomes visible by vaginal ultrasound when the serum HCG level reaches 1500 IU/L. The absence of a gestational sac when the HCG is above 1500 IU/L is strongly suggestive of an ectopic pregnancy. The apparent presence of a gestational sac at lower levels of HCG should also raise the clinicians suspicion of ectopic pregnancy, particularly if the patient is a smoker or has other risk factors for ectopic pregnancy (for example, a history of unilateral abdominal pain, pelvic inflammatory disease, ruptured appendix, prior use of an intrauterine device, or conception while using a progesterone-only contraceptive). Although not as sensitive as a serum HCG determination, most urine pregnancy tests can detect 25 to 30 IU/L of HCG and therefore become positive at three to four weeks of gestation; well before the first menstrual period is missed or an ectopic pregnancy becomes either symptomatic or dangerous.

Adolescent abortion patients generally suffer fewer major complications (such as fever and hemorrhage) than do adult abortion patients, but may be at higher risk for cervical injury, particularly when the procedure is preformed after the 12th week of gestation. Nevertheless, current data indicate that if modern techniques are used to dilate the cervix, there is little or no increase in the risk of subsequent miscarriage associated with having a therapeutic abortion.

There are anecdotal reports of poor psychological outcomes and anniversary suicide reactions following therapeutic abortions, particularly among adolescents who are coerced or persuaded to abort against their will; however, adolescents who are provided with adequate pre- and post-abortion counseling usually do well, postpone further conceptions, and pursue other educational and vocational training.

Katie and Mike are morally opposed to abortion. Although adoption may therefore be the ideal solution to this otherwise devastating dilemma, few teenagers carry through with this management option. Those who do need a tremendous amount of external support.

4. *At what point would you include Mike in the discussion?*

Katie should be encouraged to involve Mike in all discussions; his input is integral to the decision-making process. Although studies show that the majority of adolescent childbearing unions dissolve before the child is two years old, there is also ample data documenting the importance of promoting the involvement of the father of the baby. He and the young woman's mother are typically her two most important support people. Conversely, the presence of interpersonal conflict between the young mother and these two individuals has been shown to be positively associated with maternal stress and depression. Clinicians may wish to use Handout 1, included in this module, to help couples work through this difficult decision-making process together.

SECTION 5 ADDITIONAL QUESTIONS AND ACTIVITIES

SUGGESTED ACTIVITIES

1. Select five class members to be a panel of experts and let the rest of the class be the State House of Representatives and Senate. Debate the state's policy on confidential abortions and prenatal care for minors. You may wish to invite individuals who have had or perform abortions to participate.

2. Write two or three paragraphs about your feelings about pregnancy, abortion, and adoption. Consider how your feelings may help or hinder your efforts to treat pregnant teenagers.

SUGGESTED QUESTIONS FOR FUTURE RESEARCH

1. Why do young women who choose abortion over parenthood tend to have brighter academic and vocational futures? Is it because they have goals for the future that make early motherhood undesirable? Or is it because the pressures and demands of motherhood prevent adolescent parents from achieving their educational and career goals?

2. How does abortion affect adolescent pregnancy statistics? Are adolescents who are at lowest risk for adverse pregnancy outcomes more likely to seek abortions than their higher-risk peers?

SECTION 6 SUGGESTED READING

1. Zabin LS, Hirsch MB, Boscia JA. Differential characteristics of adolescent pregnancy test patients: Abortion, childbearing, and negative test groups. *J of Adol Health Care* 1990;11:107-113.
   This study examines the relationship between decisions made about pregnancy management and the subsequent life course development of 360 African American teenage women in Baltimore. The investigators found that teenagers who obtained abortions were least likely to become pregnant again during the two-year follow-up period and were most likely to complete their high school education. Abortion patients did not experience more psychological stress or anxiety and were no more likely to have psychological problems than were other study subjects.

2. Russo NE, Dabul AJ. The relationship of abortion to well-being. *Prof Psychol: Research and Practice* 1997:28:23-31.
   This study provides an overview of the relationship between abortion and self-esteem. The results help to dispel myths about the potential for psychological trauma following an abortion.

3. Zuravin SJ. Child maltreatment and teenage first births: A relationship mediated by chronic sociodemographic stress? *Am. J Orthopsychiat*. 1988;58:91-103.
   The author summarizes the evidence for and against a causal relationship between early childbearing and child abuse and neglect, and tests the hypothesis that the relationship is mediated through chronic stress.

4. Dukewich TL, Borkowski JG, Whitman TL. Adolescent mothers and child abuse potential: An evaluation of risk factors. *Child Abuse & Neglect.* 1996;20:1031-1047.
   This paper provides an excellent framework for evaluating the risk of child abuse and neglect in a family.

5. Barnet B, Joffe A, Duggan AK, Wilson MD, Repke JT. Depressive symptoms, stress, and social support in pregnant and parenting adolescents. *Arch. Pediatr Adoles Med.* 1996;150:64-69.
   This paper emphasizes the importance of involving the father of the baby in decision-making processes. Helping the young couple work through and resolve sources of interpersonal conflict can significantly decrease maternal stress and depression.

6. Cates W, Schulz KF, Grimes DA. The Risks Associated with Teenage Abortion. *N Engl J Med* 1983;309:621-4.
   This paper reviews the medical and psychological risks and sequela associated with therapeutic abortions in adolescent patients.

7. Larsson PG, Platz-Christen JJ, Thejls H, Forsum U. Incidence of pelvic inflammatory disease after first-trimester legal abortion in women with bacterial vaginosis after treatment

with metronidazole: A double-blind, randomized study. *Am J Obstet & Gynecol*. 1992;166:100-103.
This paper emphasizes the importance of screening and treating patients for both common sexually transmitted diseases (for example, gonorrhea and chlamydia) and vaginitis prior to abortion.

8. Kalmuss D, Namerow PB, Cushman LF. Adoption versus parenting among young pregnant women. *Fam Plann Perspect* 1991;23:17-23.
The authors of this paper contrast critical elements of the decision-making processes that antedated the choices that a cohort of 430 racially mixed adolescent mothers-to-be made about placing their children in adoptive homes.

9. Emancipator K, Cadoff EM, Burk D. Analytical versus clinical sensitivity and specificity in pregnancy testing. *Am J Obstet & Gynecol*. 1988;158:613-616.
This paper provides an excellent overview of pregnancy testing. The only caveat is that it was written before vaginal ultrasound became widely available. Hence, the discriminate zone (the level of HCG at which a gestational sac can be detected by ultrasound) is still given as 6500 IU/L. The reader should bear in mind that with modern ultrasound techniques, a gestational sac can usually be detected at an HCG level of 1500 IU/L.

10. Edwards J, Carson SA. New technologies permit safe abortion at less than six weeks' gestation and provide timely detection of ectopic gestation. *Am J Obstet & Gynecol*. 1997;176:1101-1106.
The results of this research obviate the need to postpone abortion until the second month of gestation.

11. El-Refaey H, Rajasekar D, Abdalla M, Calder L, Templeton A. Induction of abortion with Mifepristone (RU486) and oral or vaginal Misoprostol. *N Engl J Med* 1995;332:983-987.
This paper provides a state-of-the art discussion of the risks and benefits of various medical abortion techniques.

12. Winifoff B. Acceptability of medical abortion in early pregnancy. *Fam Plann Perspect.* 1995; 27:142-148.
This study examines women's preferences regarding medical and surgical abortion.

SECTION 7 AUDIO-VISUAL RESOURCES

1. Four Pregnant Teenagers: Four Different Decisions. (51 minutes). This program dramatizes the stories of four teenage couples. One couple puts the baby up for adoption, one keeps the baby, one keeps the baby and gets married, and one chooses to abort. $249. Accompanying teacher's guide.
   Contact: Sunburst Communications, 39 Washington Avenue, Box 40, Pleasantville, NY 10570-9971, 800-431-1934.

2. Growing Up Young. 1980 (22 minutes). This program explores the issues of teenage sexuality and decision making after a positive pregnancy test. One of the participants chooses abortion. $99.
   Contact: Perennial Education, Inc., 1560 Sherman Avenue, Suite 100, Evanston, IL 60201, 800-323-9084.

3. Abortion: For Survival. (30 minutes). This program presents the facts about abortion and shows an abortion at eight weeks of gestation. $29.95
   Contact: Fund for the Feminist Majority, 8105 West Third, Suite 1, Los Angeles, CA 90048, 213-651-0495; or 1600 Wilson Boulevard, Suite 801, Arlington, VA 22209, 703-522-2214.

4. Bittersweet. (17 minutes). This program presents the option of adoption as a positive choice to teens; the story is told from the perspective of a high school student, her parents, and the adoptive family. $52.95. Accompanying study guide.
   Contact: New Hope Child and Family Agency, 2611 NE 125th Street, Suite 146, Seattle, WA 98125, 206-363-1800.

5. Abortion Denied. Produced by: The Feminist Majority Fund (1990)
   Tells about the adverse effects of parental consent and notification laws for teenagers.

6. Talking Together. Produced by: Debbie Gilboy (1987)
   Training tape for professional working with pregnant and parenting teenagers. Offers suggestions for improving history taking and counseling.

SECTION 8 HANDOUTS/OVERHEADS (ATTACHED)

HANDOUT 1

Unsure about Your Pregnancy?

A Guide to Making the Right Decision for You

We prepared this guide for the many women, teen and adult, who become pregnant and find it hard to make a decision about what to do.
The ideas in this guide are based on our experience counseling thousands of women. This guide, like counseling, does not encourage you to make any particular decision. Rather, it offers ideas that have been helpful to other women as they struggled to make the decision that was right for them.
Each person reading this is facing her own special situation. Yet we have found that each woman also has some things in common with others who are facing the same decision. We hope you will use these ideas to help you become clear about your own thoughts and feelings.

First, are you pregnant?

When you suspect that you are pregnant, your first step is to get a pregnancy test. (If you use a home kit, you should still have the pregnancy confirmed with a physical exam by a doctor).
If you find out that you are not pregnant—and if you really don't want to be pregnant now—this may be the time to obtain a dependable method of birth control.
If you are pregnant, you have three basic choices:

CHOICE A: Continue the pregnancy and keep the baby.

CHOICE B: Continue the pregnancy and place the baby for adoption.

CHOICE C: End the pregnancy now by having an abortion.

The rest of the guide asks questions to help you clarify:

- Your feelings about being pregnant
- Your plans and dreams for the near future
- Your thoughts, values, or beliefs about each of your options

The guide also gives ideas about:

- Where you can obtain more information and help
- How to go about deciding which option to choose

How do you feel about being pregnant?

Perhaps you planned to get pregnant because you wanted to have a baby, and that is still what you want most at this time. If so, you will probably decide on Choice A—continuing the pregnancy and keeping the baby.

If that is no longer what you want, or if you didn't intend to get pregnant in the first place, you can start by looking more closely at how you feel about being pregnant.

An unintended pregnancy can arouse many different feelings. In fact, most women find they have mixed or conflicted feelings.

For example, you might feel:

- Worried about being able to manage a baby
- Afraid you'll have to give up other things that are important to you
- Concerned about how other people may react

At the same time, you might also feel:

- Happy to learn that you can get pregnant
- Pleased to have the opportunity to have a baby
- Excited by a new and unique event in your life

Write down a list of the different feelings you have right now about being pregnant. (When you can't think of any more, go on to the next section. Later, if you think of other feelings, you can add them to your list.)

What are your plans and dreams?

Here are some good questions to ask yourself about your life right now and your future:

- What are two or three things that matter most to me in my life right now?
- What are two or three things that I hope to have or achieve in the next five or ten years?
- In order to have or achieve those things,
    - How would having a baby help?
    - How would adoption help?
    - How would abortion help?
- What would I lose or give up right now:
    - If I have the baby?
    - If I place the baby for adoption?
    - If I have an abortion?

What would I lose or give up in the next five or ten years:

- If I have the baby?
- If I place the baby for adoption?
- If I have an abortion?

How much money would it probably cost me:

- If I have the baby?
- If I place the baby for adoption?

- If I have an abortion?

How would other people react who matter to me (such as my partner, parents, friends):

- If I have the baby?
- If I place the baby for adoption?
- If I have an abortion?

What are your values? What do you believe?

Up to this point, you've been looking at the possible effects of different decisions on your plans and dreams. Now look at your thoughts, values, and beliefs about your situation and the different choices.

Following are some statements people often make. Write down the ones that fit for you, and any other thoughts you have.

CHOICE A: Having a Baby and Keeping It

- I feel ready to take on the tasks of being a parent.
- Some people have said they will help me.
- I want a child more than I want anything else.
- My partner and I both want a baby.
- I think I am too young (or too old) to have a baby.
- I don't believe I can manage this by myself.
- I don't have enough money to raise a child properly.
- Having a child now would stop me from having the life I want for myself.

CHOICE B: Having a Baby and Putting It Up for Adoption

- I could continue the pregnancy and give birth, without having to raise the child.
- I could help the child have parents who want it and can care for it.
- I could postpone being a parent myself until later in my life when I feel ready.
- I like the idea of giving someone else the baby they can't create themselves.
- I don't think I could give up the baby after nine months of pregnancy and delivery.
- I would not like living with the idea that someone else has my baby.
- I would worry about whether the baby was being well treated.
- My family would rather have the baby stay in the family than go to strangers.

CHOICE C: Having an Abortion

- I would like to postpone being a parent until my situation is better (older, finished school, more financially secure, in a stable relationship).
- I don't want to be a single parent.
- My partner doesn't want a baby, and I want to consider his feelings.
- An abortion is a safe and sensible way to take care of an unwanted pregnancy.
- My religious beliefs are against abortion.
- I am afraid I might not be able to get pregnant again.
- My family (or someone else that is important to me) opposes abortion.
- I don't have enough money right now to pay for an abortion.

Do you need more information?

There may be things you need to find out before you can make a decision. If so, you can get more facts about each of your choices from places like the following. Either call with your questions, or ask them to send you information.

- Adoption agencies and abortion clinics in your area are listed in the yellow pages of your telephone book. (If an agency tells you that abortion is unsafe or immoral, that is a clue that they are not interested in helping you make your own decision; call the National Abortion Federation's hotline for the name of an agency that will give you accurate information and non-judgmental assistance.
- Your state or local department of social services, family planning clinics, and many physicians have information about adoption, prenatal care, delivery, and parenting.
- NAF's toll-free hotline has facts about pregnancy and abortion and can refer you to qualified medical facilities near you (800-772-9100).
- Planned Parenthood has information about all three options.

Note: If you are a teenager considering abortion, some states say you can make that decision on your own, but others require teens to involve a parent or close family member. If you have questions about your state, call the National Abortion Federation's hotline, 800-772-9100. In Washington, D.C., call 667-5881.

Summing up your feelings

If you—like so many women—have mixed feelings about being pregnant and about each of the choices open to you, making a decision can feel scary and difficult. In making your decision, it is helpful to know your feelings, to name them, and to look at them. To show how you are feeling right now, try to finish each of these sentences.

- The idea of having a baby makes me feel
  because
- The idea of placing a baby for adoption makes me feel
  because
- The idea of having an abortion makes me feel
  because

Now that you have explored your choices, obtained more information, and clarified your feelings and values about the choices, you may be ready to make a decision.

Since you probably have conflicting feelings about each choice, you may find that whatever decision you make won't feel like the "perfect" decision. It is natural to continue to have some mixed feelings. Ask yourself, "Can I handle those feelings?" If your answer is "Yes," you are ready to act on your decision.

If you cannot decide, you may need to get more information about your choices or talk with someone you trust—not to decide for you, but to help you decide what you think will be best for you. That person could be a:

- Parent of other family member

- Teacher or religious counselor
- Close friend or partner who cares about you
- Counselor in a social service or family planning agency such as Planned Parenthood.

These questions might help you and that person discuss your choices. Even without knowing how far along your pregnancy is, we must emphasize the importance of deciding soon. If you decide to continue the pregnancy, it is important to begin prenatal care early so you and your baby are healthy. If you decide on abortion, the earlier you obtain it, the safer it will be.
No one can predict the future. No one can be certain what all of the consequences of any choice may be. What you can do, however, is carefully consider your plans, your values, and your feelings, and then make the best decision you can at the time.

Source: Beresford, T. *Unsure about Your Pregnancy? A Guide to Making the Right Decision for You.* Washington, DC: The National Abortion Federation; 1992. Reprinted with permission.

SUBTOPIC 3

MANAGING AN ADOLESCENT PREGNANCY

TIMELINE (60 minutes)

5 min	Introduction/Ice Breaker
5 min	Review of Objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

This case, which is best suited to residents and other advanced students, can also be used with nurse practitioners, physician assistants, certified nurse-midwives, and physicians. It provides an overview of the major medical and psychosocial risks associated with adolescent childbearing. It also reviews differences between adolescent-oriented and adult-oriented prenatal care. Adolescent slang may be omitted at the leader's discretion.

By the end of the discussion, participants should be able to:

1. All Trainees: List two medical and two psychosocial concerns about adolescent pregnancy.

2. Students: Explain how adolescent physical and psychosocial development affect the young person's ability to cope with pregnancy.

3. Residents: Give your colleagues three reasons for establishing a separate program for pregnant teenagers at your practice.

SECTION 2 OVERVIEW

It has been difficult to determine why adolescent mothers and their children experience more obstetric and neonatal complications than their adult counterparts (see Handout 1). In most studies age is confounded by other maternal characteristics such as race and income level—factors that can predispose pregnant women of all ages to adverse medical and psychosocial outcomes.

Because the onset of menarche does not mark the cessation of growth or the attainment of full reproductive maturity, some investigators believe that there is a subgroup of very young adolescents for whom the etiology of the risks associated with childbearing are primarily biologic and due to factors such as incomplete maternal growth and maternal reproductive immaturity. Potentially relevant physiologic differences between younger and older pregnant women reflect the postmenarcheal growth and maturation of the reproductive system. Studies of nulliparous adolescent females indicate that the reproductive organs continue to grow, the vaginal fluids become more acidic, the length of the luteal phase of the menstrual cycle increases, and luteal phase levels of progesterone rise for several years after a woman is able to conceive. Several lines of evidence suggest that younger adolescents, particularly those who conceive soon after menarche, are less physiologically and reproductively mature than are their chronologically and gynecologically older peers. For example, many of these young women have the capacity to grow in height during and after gestation, most lack the intra-abdominal fat stores that appear to be necessary for optimal placentation, and some appear to conceive before their hypothalamic-pituitary-gonadal axis has fully matured. These findings suggest that implantation may occur in a suboptimal nutritional and hormonal environment during pregnancies that are conceived soon after menarche. Although nothing is known about the ways in which the anatomical and physiologic changes that accompany the post-menarcheal growth and maturation of the reproductive system affect the reproductive performance of adolescents, studies of pregnant adult women suggest that characteristics such as a shorter-than-average cervix, an alkaline vaginal pH, and/or an immunologically immature lower genital tract mucosa could predispose young, still growing, reproductively immature adolescents to infection-mediated pre-term delivery.

Although further studies are needed to determine the extent to which reproductive immaturity predisposes adolescents to pre-term delivery, current data suggest that even for most very young adolescent mothers the etiology of the risks associated with childbearing is primarily social and due to factors such as poor health habits, poverty, and stress. Studies controlling for concurrent high-risk maternal conditions find no association between young maternal age and the majority of obstetric complications traditionally associated with adolescent childbearing. For example: (1) the risk of developing pregnancy-induced hypertension appears to be more closely related to parity than to maternal age; (2) anemia is better explained by poverty, poor nutritional habits and late prenatal care than the effects of maternal age and pubertal growth on iron stores; and (3) as the age at menarche decreases, cephalopelvic disproportion is increasingly related to poor preparation for and support during labor rather than attenuated or incomplete pelvic growth.

The results of well-controlled studies indicate that very young adolescent mothers give birth to smaller babies than do older mothers largely because they are smaller, more impoverished and less able to obtain adequate prenatal care. After accounting for the adverse effects of these and other

concurrent low birth weight risk factors, one group of investigators reported that the incidence of term low birth weight deliveries actually increased with maternal age. Although similar conclusions cannot yet be drawn about the association between young maternal age and pre-term delivery, this may be because our incomplete understanding of the causes of pre-term labor precludes adequate controls for confounding maternal characteristics.

Thus, the consensus among most investigators and health care providers is that the majority of the medical complications associated with adolescent childbearing can be reduced by early, consistent prenatal care (see Handout 1). Current data suggest that augmentation of maternal weight gain and prompt treatment of sexually transmitted diseases reduce the risks of low birth weight and pre-term delivery, respectively. Unfortunately, as the following case illustrates, adolescents often procrastinate—particularly those who conceive before their 15th birthday—and are therefore more likely to obtain late, inconsistent prenatal care than adults.

The advantages of separate, prenatal care programs for pregnant adolescents are debated; some data suggest that among adolescents, prenatal care may be more effective when provided within the context of a comprehensive, multidisciplinary program. One group of investigators reported that only 9% of the infants born to young, African American teenagers attending a comprehensive adolescent prenatal program, compared with 20.9% of the infants born to their peers who were cared for in a traditional, adult-oriented obstetric clinic, were low birth weight. While some subsequent studies corroborate the benefits of adolescent-oriented prenatal care, others do not. It has been suggested that the presumed benefits of adolescent-oriented prenatal care may be attributable to the social factors that determine the use of these special programs, rather than unique aspects of the care they provide. Further studies are needed to determine if tangible differences in the components of prenatal care provided in a comprehensive adolescent-oriented prenatal care program and a traditional adult-oriented obstetric clinic improve the outcomes of adolescent pregnancies.

Comparatively, little is known about the young men who father adolescent pregnancies. Although available data are scarce, they are consistent in showing that the father is often two to three years older than his teenage partner. Thus, many fathers are no longer teenagers when their partners conceive. Those young men who are teenagers when they father their first child appear to be very similar to their female counterparts; they have significantly more academic and behavioral problems than their childless peers and express concerns about future educational, vocational, and family problems. This is concerning because studies suggest that pregnant women rely heavily upon the support of their partners. While this support has the potential to mitigate the adverse effects of psychological stress, support provided by a partner or peers who engage in deviant social behaviors could have a negative impact on pregnancy outcome if the adolescent mother feels that obtaining support is contingent upon her involvement in socially and medically risky behaviors, such as substance abuse. The non-teenage (adult) men who father the children of adolescent mothers are equally problematic. They tend to be undereducated and underemployed. Because teen mothers are more likely to live independently with these older mates, their childbearing unions often deprive them of the emotional and financial support typically afforded by an extended family.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

April is a small, thin, tired-looking 15–year–old who is brought to your office by her equally young-looking, unkempt boyfriend Joe. April tells you she thinks she is about seven months pregnant, but she isn't really sure when her last period was because she only started menstruating last summer and still sometimes skips months. She is also confused because the last period she remembers having was lighter than usual and then she spotted for the next two months—about when she should have had a period.

April explains that she and Joe moved here three months ago. They tried to get her an appointment for prenatal care since their arrival, but had trouble scheduling one. April admits she missed her first appointment—Joe's van wouldn't start.

Further history reveals that April and Joe, her 19–year–old "fiancé," have lived together for about six months. They met last year, soon after Joe got out of jail. Neither has graduated from high school. April quit during eighth grade because she "got bored" and "none of my friends were in school." April isn't sure how far Joe went in school. He tells you he almost had enough credits to graduate when he was put in jail "for fighting." Joe explains that he "never got around to finishing high school" because he met April and she got pregnant, and now he needs to find a job but can't find one that pays "decent money" because he doesn't have a diploma.

The couple left their family home five months ago, when they first found out April was pregnant, because they were afraid her parents would make her get another abortion. They traveled for a couple of months and then decided to settle down for a while because Joe has some friends in town who promised to help him find a job.

Food has apparently been in short supply. They've been eating mostly in fast food places and sleeping in Joe's van. April is afraid she hasn't gained much weight and is worried because she has been "discharging" and having stomach cramps. As you proceed with the examination, you notice that April's uterus feels small for seven months.

1. What are the major risks associated with adolescent childbearing?

2. What diagnostic tests do you perform?

3. What are some differences between adolescent-oriented and adult-oriented prenatal care, and how can they be implemented in a private practice or clinic setting?

SECTION 4 SUGGESTED ANSWERS

1. *What are the major risks associated with adolescent childbearing?*

   Prematurity (birth prior to the 37th week of gestation) and low birth weight (less than 2500 grams) are the two most frequently reported and serious neonatal complications associated with adolescent childbearing. Data indicate that infants born to mothers less than 16 years old are more than twice as likely to be low birth weight and nearly three times more likely to die within the first 28 days of life than are infants born to older mothers.

   The additional concerns that health care providers, teachers, and parents express about adolescent pregnancy reflect the numerous medical and psychosocial problems associated with childbearing at this age. These are listed in Handout 1.

2. *What diagnostic tests do you perform?*

   Because one out of three pregnant teenagers is infected with Chlamydia trachomatis, testing for common sexually transmitted diseases and a Papanicolaou (Pap) smear are a critical part of the initial prenatal examination. To this end, cultures for chlamydia and gonorrhea should be obtained and a wet mount should be prepared for detection of other treatable vaginal pathogens, such as the aerobic and anaerobic microorganisms that cause bacterial vaginosis and trichomonas. Suspicious vulvar and vaginal lesions should be cultured for herpes, serologic tests for Syphilis and Hepatitis B should be preformed routinely, and HIV testing should always be offered (if not encouraged). Some health care providers recommend routine screening for vaginal and rectal carriers of Group B Streptococcus during the third trimester of pregnancy. This may be particularly important when treating pregnant teenagers, as they are more likely to be Group B Streptococcus carriers than adult women. Finally, all prenatal patients should have their blood type determined and be screened for urinary tract infection, anemia, and abnormal blood group antibodies.

   Recent data suggest that cervicovaginal microflora and/or the inflammatory responses they engender produce factors that tend to predispose women to pre-term labor by causing premature cervical ripening (effacement and dilation) and premature rupture of the placental membranes. Some of the microorganisms believed to mediate such processes are recognized pathogens, such as Chlamydia trachomatis and Trichomonas Vaginalis, but others, such as the aerobic and anaerobic microorganisms characteristic of bacterial vaginosis, are often considered normal vaginal flora. The physiologic changes associated with these types of infection may be more ominous for women who are anatomically predisposed to pre-term labor (such as women who have short or incompetent cervixes).

   Both physiologic and psychosocial aspects of adolescent development are thought to predispose teenagers to the acquisition of genital tract infections tentatively implicated in pre-term labor. From the physical point of view, the immaturity of the adolescent cervix is

thought to increase the risk of acquiring infections with organisms like Chlamydia trachomatis which inhabit columnar epithelial cells. In young women, the columnar epithelial cells that line the endocervical canal are displayed prominently on the external cervical os; later in life, these vulnerable columnar cells are replaced by squamous epithelial cells that present a less hospitable environment for potential pathogens. From the psychosocial point of view, adolescents are at increased risk for acquiring sexually transmitted diseases because they tend to be "serially monogamous" (this exposes them to a large number of different partners).

In addition, many adolescents communicate poorly with one another and are more reluctant than adults to ask their partners about symptoms and/or to use a condom. Their concrete reasoning style and feelings of personal invincibility foster an "it can't happen to me" attitude that interferes with regular condom use.

3. *What are some differences between adolescent-oriented and adult-oriented prenatal care, and how can they be implemented in a private practice or clinic setting?*

Comprehensive, multidisciplinary, adolescent-oriented prenatal care programs are designed to meet the unique nutritional, psychosocial, and educational needs of adolescent parents. The results of some studies suggest that the benefits of these special programs could be mediated by the reduction of barriers to obtaining care, improvements in maternal nutritional status—particularly weight gain—and closer attention to the diagnosis and treatment of sexually transmitted diseases and non-obstetric, psychosocial problems.

Specifically, within an adolescent-oriented prenatal care program, April's first problem, late prenatal care, would have been addressed by expediting the mechanics of obtaining prenatal care. When she missed her first appointment, an effort would have been made to locate her and reschedule the appointment the following week. Even though adolescents enter prenatal care later and miss significantly more of their clinic appointments than do adults, they can be helped to obtain an adequate quantity of prenatal care simply by rescheduling all missed appointments rapidly. Additional measures that can be implemented to eliminate common access-to-care barriers included the following:

- Walk-in appointments and a waiting time of less than one week for appointments
- Special efforts to schedule appointments at times that do not conflict with the teenagers' school and/or work schedules
- Sliding clinic fee scales that enable uninsured and underinsured patients to obtain the care and supplies they need
- Free bus tokens and help with accessing other forms of free transportation

To address April's second problem—her increased risk of pre-term labor—adolescent-oriented prenatal care programs are designed to augment aspects of traditional adult-oriented programs that have the potential to affect three of the most important determinants of adverse pregnancy outcomes among adolescents: low pre-pregnant weight and body fat stores compounded by poor maternal weight gain; short, immature cervix compounded by

lower genital tract infections; and excessive maternal stress compounded by inadequate family and social support. Most adolescent-oriented programs are staffed by health care providers who are assiduous about screening for lower genital tract infection as well as dietitians and social workers who work with the primary health care providers to:

- Identify patients who are experiencing food shortages at home
- Expedite enrollment for Women, Infant and Children's food supplements
- Address immediate social and mental health problems and concerns
- Help patients find ways to cope with the stresses in their lives that will not compromise their own health or that of their fetus (for example, alternatives to the use of illicit, mood-altering substances and tobacco)
- Help patients develop effective support networks and design achievable educational and vocational goals

In many programs, clinic-based services are augmented with in-home services provided by outreach workers who visit patients in their homes. This has been shown to be one of the most cost-effective ways to bridge the gap between young, socially isolated families and the medical and social service systems. Home visitors are better able to identify individual needs and work with community providers to develop care plans that respond flexibly to the real-world problems that pregnant and parenting adolescents face.

Recent data suggest that the rapid initiation of nutritional supplements and the enhancement of maternal social support through referrals to supportive community agencies could mitigate against the adverse effects that small maternal size, undernutrition, stress, and depression have on maternal weight gain and utero-placental blood flow. To the extent that it is possible to incorporate these services into traditional prenatal care programs, they may have more impact on the adolescent mother's risk of low birth weight and pre-term delivery.

Tangible differences in the components of prenatal care provided in adolescent-oriented and adult-oriented prenatal programs do not fully explain the beneficial effects of prenatal care as a whole on the outcomes of the adolescent pregnancies; it is also important to consider possible differences in the less tangible components of care and support that teenagers receive from the individuals who staff adolescent-oriented and adult-oriented prenatal programs. A non-judgmental, caring approach is critical and may improve compliance. Because special, multidisciplinary, adolescent-oriented prenatal programs are too costly to serve all pregnant teenagers in this country, efforts should be made to incorporate the tangible and intangible aspects of the care provided in these types of programs into routine, adult-oriented prenatal care programs and private practices.

SECTION 5 ADDITIONAL QUESTIONS AND ACTIVITIES

SUGGESTED ACTIVITIES

1. Break the class into groups of two. Let one person be the health care provider and the other person be the patient. Role play your response to the teenager who:

- Comes for her first prenatal visit at 36 weeks gestation
- Calls to reschedule her first prenatal appointment for the third time
- Has chlamydia for the third time this pregnancy
- Has gained only two pounds at 28 weeks of gestation

2. Write two or three paragraphs about your own feelings about, and experiences with, compliance. Think about how they will help and hamper you in treating pregnant teenagers.

SUGGESTED QUESTIONS FOR FUTURE RESEARCH

1. Are there any inherent physiologic risks associated with adolescent childbearing?

2. How do acute and chronic stress affect pregnancy outcome?

SECTION 6 SUGGESTED READING

1. Stevens-Simon C, White M. Adolescent pregnancy. *Pediatric Annals* 1991;20:322–331.
Klerman LV. Adolescent pregnancy and parenting controversies of the past and lessons for the future. *J Adol Health* 1993;14:553–561.
These two papers review reasons for concern about adolescent pregnancy. Both the medical and the psychosocial risks and sequelae associated with childbearing at this age are discussed.

2. Wiemann C, Berenson AB, Pino L, McCombs SL. Factors associated with adolescents' risk for late entry into prenatal care. *Fam Plann Pespect*. 1997;29:273–276.
This paper presents provocative data. The authors suggests that some of the traditionally identified barriers to prenatal care among adult women may not be relevant to teenagers.

4. Scholl TO, Hediger. Weight gain, nutrition, and pregnancy outcome: Findings from the camden study of teenage and minority gravidas. *Seminars in Perinat*. 1995;19:171–181
Maternal pre-pregnant weight and maternal weight gain are two of the most important determinants of infant size at birth. This paper summarizes the evidence that suggests that young, still growing adolescent mothers need to gain additional weight during gestation to have the same sized babies as older, more reproductively mature women.

5. McAnarney ER, Stevens-Simon C. Maternal psychological stress/depression and low birth weight. *AJDC* 1990;144:789–792.
Pregnant adolescents are more likely to encounter stressors in their daily lives than are pregnant adults. This paper reviews physiologic mechanisms that could mediate the adverse effects of acute and chronic stress on pregnant women and their offspring.

6. Gibbs RS, Romero R, Hillier SL, Eschenbach DA, Sweet RL. A review of pre-term birth and subclinical infection. *Am J Obstet Gynecol* 1992;166:1515–1528.
This paper presents data that suggest untreated lower genital tract infections are a major cause of pre-term labor and pre-term rupture of membranes.

7. Stevens-Simon C, McAnarney ER. Tangible differences in teen and adult care. *J Adol. Health Care*. 1991;12:169.
Stevens-Simon C, Wallis J, Allan-Davis J. Antecedents of pre-term delivery among adolescents: Relationship to type of prenatal care. *J Mat Fetal Med*. 1995;4:186–193.
Comprehensive, adolescent-oriented, prenatal care may reduce the risks associated with adolescent childbearing. These two papers explore several possible explanations for the successes and failures of this intervention strategy.

8. Olds DL, Kitzman H. Can home visitation improve the health of women and children at environmental risk? *Pediatrics*. 1990;86:108–116.
This paper reviews the evidence that in-home support improves the outcome of high-risk pregnancies and prevents aversive parenting. The potential benefits of this approach for young minority women are emphasized.

9. Taylor D, Chavez G, Chabra A, Boggess J. Risk factors for adult paternity in births to adolescents. *Obstet & Gynecol*. 1997;89:199–205.
Donovan P. Can statutory rape laws be effective in preventing adolescent pregnancy ? *Fam Plann Perspect*. 1997;29:30–34.
These two papers discuss the problems posed by adult males who father teen pregnancies.

10. Dearden KA, Hale CB, Woodley T. The antecedents of teen fatherhood: A retrospective case-control study of Great Britain youth. *Am J Pub Health*. 1995;85:551–554.
Cox JE, Bithony WG. Fathers of children born to adolescent mothers. Arch Pediatr Adoles Med 1995;149:962–966.
These two papers discuss risk factors for, and risks associated with, teenage fatherhood.

SECTION 7 AUDIO-VISUAL RESOURCES

1. Flour Babies. 1989 (30 minutes). This program dramatizes a class experience in which teens learned the responsibility of parenting by carrying around five-pound sacks of flour. $345.
   Contact: The Media Guild, 11722 Sorrento Valley Road, Suite E, San Diego, CA 92121, 800-886-9191.

2. Teenage Father. (38 minutes). This program dramatizes the stories of three teenage fathers as they make decisions about their relationships with their pregnant girlfriends and with their children. $199. Accompanying teacher's guide.
   Contact: Sunburst Communications, 39 Washington Avenue, Box 40, Pleasantville, NY 10570-9971, 800-431-1934.

3. Just Beginning: Prenatal Care For Teens. (21 minutes). This program stresses the importance of early prenatal care and presents the responsibilities that accompany pregnancy. $149. Accompanying teacher's guide.
   Contact: Sunburst Communications, 39 Washington Avenue, Box 40, Pleasantville, NY 10570-9971, 800-431-1934.

4. When Your Unborn Child Is on Drugs, Alcohol, or Tobacco. 1990 (15 minutes). This program presents the impact of substance use on the fetus at each month of gestation. $260.
   Contact: Churchill Media, 12210 Nebraska Avenue, Los Angeles, CA 90025, 800-334-7830.

5. Smart Talk: Sexually Transmitted Disease Prevention (13 minutes). This program presents interviews with teens about sexually transmitted diseases and the necessity of using condoms or abstaining to prevent their spread. $189.
   Contact: ETR Associates, P.O. Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

6. Making A Difference: A Mother's Guide To Prenatal Care. Produced by: Injooy Productions (1992)
   Discusses the importance of early prenatal care, good diet and avoidance of high-risk behaviors.

7. Keisha's Choice: A Look At Teen Pregnancy and Drugs. Produced by: Intermedia, Inc. (1991)
   A teen makes difficult choices between partying with peers and having a healthy baby.

8. Labor and Delivery For Teens. Produced by: Churchill Media (1993)
   Follows teens through labor and delivery, with animated illustrations of the physiology. The importance of good prenatal care and staying in school are also stressed.

SECTION 8 HANDOUTS/OVERHEADS (ATTACHED)

COMMON MEDICAL AND PSYCHOSOCIAL PROBLEMS AMONG ADOLESCENT MOTHERS AND THEIR CHILDREN

	MEDICAL	PSYCHOSOCIAL
MOTHER		
	Small size/poor weight gain	Poor education/school failure
	Obesity/excessive weight gain	Limited vocational opportunities
	Pregnancy induced hypertension	Poverty
	Anemia	Divorce and separation
	Sexually transmitted disease	Social isolation
	Cephalopelvic disproportion	Stress/depression
	Puerperal complications	Substance abuse
	Repeat pregnancy	Repeat pregnancy
CHILD		
	Low birth weight	Developmental delay
	Prematurity	Neglect
	Sudden infant death syndrome	Behavior problems/substance abuse
	Minor acute infections	School failure and withdrawal
	Accidents	Underemployment/poverty
	Neonatal and infant death	Unplanned pregnancy

(Stevens-Simon C, White M. Adolescent Pregnancy. *Pediatric Annals* 1991;20:322-331.)

HANDOUT 1

SUBTOPIC 4

CARING FOR THE ADOLESCENT FAMILY AFTER THE BABY IS BORN

TIMELINE (60 minutes)

5 min	Introduction/Ice Breaker
5 min	Review of Objectives/Format
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

This case, which is best suited to residents and other advanced-level students, can also be used with nurse practitioners, physician assistants, certified nurse-midwives, and physicians. It provides an overview of repeat adolescent pregnancy and suggests ways of preventing this problem by providing simultaneous care for adolescent parents and their children. Teenage slang may be omitted at the leader's discretion.

By the end of the discussion, participants should be able to:

1. All Trainees: List five characteristics of an adolescent mother that would make you concerned that she would soon be pregnant again and five characteristics that would make a repeat adolescent pregnancy (recidivism) unlikely.

2. Students: Explain how adolescent psychosocial development influences the parenting styles of early, middle, and late adolescents.

3. Residents: Help an adolescent mother:
    - Elicit more help from her family and friends
    - Gain more autonomy and responsibility for the care of her child

SECTION 2 OVERVIEW

In the absence of postpartum intervention, the prevalence of second adolescent pregnancies ranges from 20% to 40% during the year following the birth of the first child and from 30% to 50% two years after the birth. The majority of repeat pregnancies occur during the five years following the first; afterwards, many women utilize abortion and/or voluntary sterilization to control their fertility. Studies suggest that young women with the following characteristics are at highest risk:

- Less than 16 years old at first conception
- Have a boyfriend over 20 years of age and/or new boyfriends who want babies of their own
- Drop out of school and/or are below expected grade level at the time of the first pregnancy
- Become welfare-dependent after the first birth
- Come from large families
- Have complications during their first pregnancy
- Leave the hospital without birth control
- Do not keep postpartum appointments
- Wanted to (or did not mind) having the first child

Many repeat adolescent pregnancies are planned, or at least not unplanned.

The prevention of repeat adolescent pregnancies is critical because current data indicate that the incidence of low birth weight and prematurity increases with each additional adolescent pregnancy, and the likelihood of completing high school, having a job, and being self-supporting decreases. All outcomes appear to be influenced by the number of additional children the mother had prior to her first child's fifth birthday.

Rapid childbearing in the short time following the birth of the first child reduces the amount of time and resources that can be spent on the first child. Adolescents who can control their fertility reap personal benefits; results suggest that the first child may also benefit from delays in subsequent childbearing.

Health care providers should be aware that even when birth weight is controlled, the post-neonatal mortality rate is approximately twice as high for infants born to adolescents under 17 as for those born to older women. The disproportionately high rate of post-neonatal morbidity and mortality is most evident among the non-low birth weight infants of adolescent mothers and has been attributed primarily to an increased incidence of accidents and infectious diseases.

In addition to experiencing more medical problems, evidence from a variety of sources indicates that the children of adolescent mothers exhibit more behavioral problems, score lower on intellectual tests, and are more likely to repeat a school grade than the children of socioeconomically similar adult mothers. In one study, it was reported that half of the 15– to 17–year–old children of adolescent mothers had already repeated at least one grade, and 60% were C or D students; grade failure was associated with high school drop out, precocious sexual activity, and behavioral problems and violence both in school and outside.

The high incidence of medical and social problems noted among the infants and children of adolescent mothers emphasizes the necessity of attending closely to their physical and psychosocial development. Toddlers who are not responding verbally and children who are failing in school must be identified before they become angry, frustrated adolescents who leave high school for a life of delinquency and/or parenthood. Encouraging these children to participate in remedial education and after-school athletic and vocational training programs may be the most effective way to stop the transmission of poverty to the next generation. In-school day care programs that promote the intellectual and psychosocial development of both the adolescent mother and her children offer promise for the future.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Trina is a 16–year–old, single mother of two who comes back to see you six months after the birth of her second child because she thinks she might be pregnant again. She is very apologetic about having missed all three of the appointments she scheduled for her postpartum examination but explains that her first child, William, has been sick with ear infections and that because her daughter, Tiffany, was born two months early, she has had to take her to the doctor twice a month to be sure she is growing.

Trina says, "When I ran out of the pills they gave me in the hospital, I wasn't worried because I had broken up with Tiffany's father and wasn't planning on doing nothing with anyone...." This story sounds a lot like the one Trina told you six months after William was born, only that time Trina hadn't taken any birth control pills at all.

Trina goes on to explain that last month she met Steve, her new 22–year–old boyfriend, who she says is different from the other guys she has known. He has graduated from high school, works, and wants to take care of her and her children. She says Steve has been trying to convince her to go back to school and finish eighth grade, but admits he would be happy to have a child of his own. Trina assures you she isn't ready for another one, yet.

She explains that things have been very difficult since Tiffany was born. Not only has she been in and out of the pediatrician's office, but her mother and aunts who were babysitting for William while she went to school aren't willing to watch both children, and the day care at her school is full. She hasn't been able to return to school or get a job, and her mother has been telling her she will need to move out because their house is too small, now that Trina's 14–year–old sister is expecting her first child and her mother is pregnant again.

1. What opportunities to prevent this pregnancy were missed?

2. Trina says she does not want another child now; do you think she would mind becoming pregnant again?

3. Why is the prevention of repeat adolescent pregnancy important?

4. Why are the infants of adolescent mothers at high risk for morbidity and mortality?

5. What community resources are available for adolescents like Trina?

SECTION 4 SUGGESTED ANSWERS

1. *What opportunities to prevent this pregnancy were missed?*

It has been reported that extending comprehensive adolescent maternity programs beyond the immediate postpartum period and providing aggressive postpartum follow-up, with a strong emphasis on family and career planning, is the most effective means of preventing repeat adolescent pregnancies, high school drop out, and permanent welfare dependency. In particular, it has been found that young mothers who are cared for with their infants receive more regular care, are more compliant with contraceptive prescriptions, and postpone second pregnancies longer than do young mothers who receive medical care in other settings.

These types of programs are predicated on the assumption that young people need motivation as much as they need contraceptives to avoid pregnancy. The premise is that modifying the aspects of an adolescent mother's life that put her at risk for inconsistent contraceptive use prior to her first conception will help her prevent additional conceptions during adolescence. To this end, young mothers are educated about contraceptives, counseled about educational and vocational options, and supported in their efforts to pursue careers in addition to motherhood. During the prenatal and postnatal period, a heavy emphasis is placed on the importance of consistent contraceptive use, regular school attendance, and future-oriented family and career planning. Providers make every effort to identify and counter environmental pressures and experiences that might make repeat pregnancy a more attractive option than contraception. To this end, they discuss concerns about contraceptive side effects and provide information about educational and vocational training opportunities in the community.

It appears that seeing teenagers and their children simultaneously minimizes the complexity of obtaining well-baby and contraceptive care. Adolescent mothers often fail to get adequate health care after their infants are born, but most manage to obtain routine well-baby services. Thus, the provider who cares for the infant may be the only health care professional who sees the adolescent mother at regular intervals following delivery. In addition to providing primary care to adolescent parents and inquiring about the young mother's use of contraceptives at each well-baby visit, it is critical to discuss school attendance, future career and family plans, and symptoms of stress and depression. In addition, teen parents should be encouraged to consider using one of the long-acting, reversible, hormonal contraceptive methods (such as Norplant and DepoProvera) or, in some carefully selected cases, the IUD. This may be an especially important consideration for those who have had compliance problems with contraceptives in the past. Studies consistently show that postpartum Norplant insertion is the most effective way to prevent repeat adolescent pregnancies. Even when access to equally effective contraceptive alternatives is guaranteed, the rate of repeat pregnancies among teenage Norplant users is dramatically lower. On average, less than 1% of Norplant users, compared with 20% of other teen mothers, becomes pregnant again during the first postpartum year. Because 5%

to 10% of teenage mothers who have Norplant inserted following delivery have the device removed during the first year of use, by the end of the second postpartum year, the repeat pregnancy rate typically ranges from 10% to 15% among former Norplant users compared with 40% to 45% among teenage mothers who have only used other types of contraceptives following delivery.

2. *Trina says she doesn't want another child now; do you think she would mind becoming pregnant again?*

As a result of our preoccupation with the societal costs of adolescent pregnancy, we have tended to disregard the potential benefits of childbearing for individual adolescents. Trina's story illustrates that teenage mothers are at particularly high risk for conception during adolescence. This is perplexing because, like Trina, most have access to contraceptives and insist that they do not want to become pregnant again "any time soon." Although the increased availability of confidential, adolescent-oriented, reproductive health care services has helped many teen mothers prevent the consequences of unprotected sexual activity, these programs have not been effective with those who do not exhibit an immediate interest in obtaining or using contraceptives. Even in health care settings that guarantee confidentiality and eliminate common knowledge, financial, and transportation barriers, young people who grow up in disadvantaged environments in which early parenthood entails little in the way of lost opportunities typically become inconsistent contraceptive users at best because they harbor ambivalent feelings about postponing conception. It appears that in the absence of competing life choices (for example, future-oriented career options), adolescents who do not mind the idea of becoming parents are particularly apt to begin to feel that the benefits of repeat conception outweigh the costs.

Indeed, the results of one study show that the reasons teen mothers cite for not using contraceptives consistently prior to their first pregnancies predict the occurrence of subsequent conceptions during adolescence. Teen mothers who attributed their failure to use contraceptives consistently prior to their first pregnancy to a lack of capacity to do so are significantly more likely to use hormonal contraceptives than those who attribute their prior failure to use contraceptives consistently to side-effect concerns and their own lack of motivation to postpone childbearing. They are also significantly less likely to conceive again within two years of the birth of their first child (13% vs. 41%; p=.03). The frequency and rapidity with which the participants in comprehensive, adolescent-oriented maternity programs become pregnant again are a strong indication that new intervention strategies are needed to eliminate the unsafe sexual practices that persist among teenage mothers who did not lack the capacity to prevent their first pregnancy.

Most teenage mothers attributed their inconsistent contraceptive use following delivery to three factors: side effects, plans to abstain from sexual intercourse and lack of motivation to postpone further childbearing. Thus, the rate of repeat pregnancies might be dramatically reduced in adolescent-oriented maternity programs if these three factors could be eliminated. To the extent that the lack of motivation to prevent conception influences the decision to discontinue contraceptives in this population, the efficacy of contraceptive

counseling may be improved by addressing the factors and events in these young mothers' lives that have the potential to undermine their motivation to use contraceptives, rather than addressing specific contraceptive side effects. In particular, further studies are needed to determine if impoverished adolescents who actually have educational and vocational experiences that compete with childbearing during pregnancy and the puerperium are less apt to feel that the risks of contraceptive use outweigh the benefits.

3. *Why is the prevention of repeat adolescent pregnancy important?*

Among adolescents, the rate of pre-term and low-birth-weight deliveries increases with parity. One study showed that 11% of first-born infants, 21% of second-born infants, and 43% of third-born infants of adolescent mothers were premature. This is of concern because prematurity and low birth weight are the leading causes of neonatal morbidity and mortality in the U.S. Pre-term infants make up less than 10% of all births in this country but account for nearly 75% of the neonatal deaths and approximately half of all neurologically handicapped infants.

In addition to the neonatal risks associated with repeat adolescent pregnancies, these conceptions create significant problems for adolescent mothers. The results of numerous studies indicate that the likelihood of completing high school, having a job, and being self-supporting decreases with each additional adolescent pregnancy. In many communities, pregnancy is the primary explanation given by female students who drop out of high school. Although school withdrawal often predates pregnancy, and pregnancy is rarely the only reason that young women leave school prior to graduation, motherhood poses many obstacles to reentering school. Studies indicate that early childbearing profoundly and adversely influences the educational, occupational and marital experiences of many young people. Even when aptitude scores, socioeconomic status, and educational aspirations are controlled, early childbearers obtain less education and less prestigious, poorer paying jobs than their peers who postpone childbearing.

Although some young mothers return to school after their children are grown, national statistics indicate that only about two-thirds of urban, African American adolescent mothers ever graduate from high school, compared with approximately 90% of urban, African American women who have their first child after they are 20. These statistics are even more dismal for young white and rural mothers. Educational deficits often prevent adolescent mothers from becoming independent, self-sufficient adults, and this situation contributes to the long-term economic and personal costs of adolescent childbearing. In one study, it was found that failure to graduate from high school within five years of the birth of the first child doubled the risk of welfare dependency two decades later.

Educational under-achievement and economic instability also contribute to the high rate of separation and divorce among adolescent couples. One group of investigators estimated that the probability of marital separation within two years was 19% if the father of the baby was a high school graduate or a skilled laborer and 45% if the father was not a high school graduate or was an unskilled laborer. It is likely that these recurrent failures account for the

higher-than-average incidence of depression and other psychiatric symptoms among adolescent mothers.

4. *Why are the infants of adolescent mothers at high risk for morbidity and mortality?*

Trina's behavior illustrates why environmental factors (such as poverty, overcrowding, and poor health habits), lack of adequate knowledge of child development, inappropriate child-rearing practices and child supervision are thought to contribute to the heightened risk of infant morbidity and mortality among the children of adolescent mothers. The antecedents of these children's psychosocial problems, like the antecedents of their medical problems, are thought to originate in poverty and age-related differences in maternal child-rearing attitudes and behaviors.

Children who have the advantage of substantial daily input from other adults do not show the same medical problems and intellectual deficits as children who are raised primarily by their adolescent mothers. However, caution must be taken in interpreting these findings. Although it has been demonstrated repeatedly that young adolescent mothers reinforce their children's vocalization less and take a more negative, punitive approach to child rearing than do adult mothers, no studies have clearly shown that these atypical and unconventional mothering behaviors contribute to the medical, social, psychological, and school problems these children encounter. It is unclear whether the presence of a more mature adult in the home has direct, beneficial effects on the development of the children of adolescent mothers or whether the same personal attributes and qualities that enable some adolescent mothers to elicit the daily support of adults in their environment may also make them more nurturing parents. Finally, this pattern appears to reverse when the teen mother reaches her early 20s; ongoing co-residence with her mother is associated with poorer, less nurturing parenting.

5. *What community resources are available for adolescents like Trina?*

Trina needs help in several areas. First, to interrupt the cycle of childbearing, it is critical to get her involved in an educational or vocational training program so that she has the opportunity to develop future-oriented career goals that can compete with motherhood. Second, to avoid abuse, neglect, accidental and non-accidental trauma, and developmental delays in her children, she needs help with parenting. Third, she needs help locating adequate child care facilities so that she has the time she needs away from her children to develop as an individual. Finally, she needs financial security regarding food, shelter, and medical needs. Punitive mandates and welfare policies that make the receipt of these types of services and benefits contingent upon regular school attendance and/or participation in family planning workshops and vocational training programs do not appear to be the answer. To date, such programs have not significantly reduced the rate of early subsequent childbearing among impoverished teenage mothers. By contrast, the relative infrequency with which socioeconomically advantaged American teenagers become parents suggests that to be successful, adolescent pregnancy prevention programs must help young parents develop long-term, future-oriented goals and objectives that are realistic and achievable.

SECTION 5 ADDITIONAL QUESTIONS AND ACTIVITIES

SUGGESTED ACTIVITIES

1. Select five class members to be a panel of experts. Have them debate the pros and cons of integrating pregnant and parenting teenagers into a traditional high school, as opposed to arranging for them to attend a separate educational program.

2. Write two or three paragraphs about your own feelings and experiences with disciplining children. Think about how they will help or hamper you in treating teenage parents.

SUGGESTED QUESTIONS FOR FUTURE RESEARCH

1. Does an adolescent's age at first conception have a direct effect on the long-term educational and vocational achievements of poor young women in this country, or does early childbearing simply hasten the inevitable for the poorest students—dropping out of high school and becoming economically dependent?

2. Why are adolescent mothers who remain single and those who continue to live with their parents more likely to graduate from high school? Is it because they have career goals that make them value scholastic achievement and a high school diploma over personal independence? Or is it because they are relieved of the burdens of child care and supporting themselves financially?

SECTION 6 SUGGESTED READING

1. Elster AB, Lamb ME, Tavare J, Ralston CW. Medical and psychosocial impact of comprehensive care on adolescent pregnancy and parenthood. *J Am Med Assoc* 1987;258:1187–1192.
   Miller BC. Adolescent parenthood, economic issues, and social policies. *J Fam Econ Issues.* 1992;13:467–475.
   These two papers review the evidence that extending comprehensive adolescent-oriented teen pregnancy programs beyond the immediate postpartum period delays repeat pregnancy and enhances high school graduation and discuss the efficacy of alternative prevention strategies.

2. Stevens-Simon C, Roghmann KJ, McAnarney ER. Repeat adolescent pregnancy and low birth weight: methods issues. *J Adol Health Care* 1990;11:114–118.
   This paper presents data that suggest that the medical and psychosocial risks associated with repeat adolescent pregnancy antedate the first adolescent pregnancy.

3. Brooks-Gunn J, Chase-Lansdale PL. Children having children: Effects on the family system. *Pediatr Ann* 1991;20:467–481.
   This paper reviews differences in the mothering behaviors of adults and adolescents.

4. Flanagan, P., McGrath, M., Meyer, E., Garcia Coll, C. Adolescent development and transitions to motherhood. *Pediatr*. 1995; 96:273–277.
   This paper discusses the ways in which motherhood and the conceptualization of the maternal role are affected by psychosocial and cognitive development during adolescence.

5. Furstenberg FF, Brooks-Gunn J, Morgan SP: Adolescent mothers and their children in later life. *Fam Plann Perspect*, 1987; 19:142–151.
   Furstenberg FF, Levine JA, Brooks-Gunn J. The children of teenage mothers: Patterns of early childbearing in two generations. *Fam Plann Perspect* 1990;22:54–61.
   Hardy JB, Shapiro S, Astone NM, Miller TL, Brooks-Gunn J, Hilton SC. Adolescent childbearing revisited: The age of inner-city mothers at delivery is a determinant of their children's self-sufficiency at age 27 to 33. *Pediatr*. 1997;100:802–809.
   These three papers present 17– to 30–year follow-up data concerning the psychosocial outcomes of poor, African American mothers who began childbearing during their teens in Baltimore. Comparisons are made between the outcomes of teen mothers and their children and socioeconomically similar women who began childbearing after 20 years of age.

6. Chase-Lansdale PL, Brooks-Gunn J, Zamsky ES. Young African-American multigenerational families in poverty: Quality of mothering and grandmothering. *Child Devel*. 1994;65:373–393.
   This paper demonstrates that cohabitation within an extended family is developmentally appropriate and beneficial for younger, but not for older, adolescent mothers.

7. Polaneczky M, Slap G, Forke C, Rappaport A, Sondheimer S. The use of levonorgestrel implants (Norplant) for contraception in adolescent mothers. *N Eng J of Med* 1994;331:1201–1230.
Berenson AB, Wiemann CM, Rickerr VI, McCombs SL. Contraceptive outcomes among adolescents prescribed Norplant implants versus oral contraceptives after one year of use. Am J *Obstet & Gynecol*. 1997;176:586–592.
Ricketts SA. Repeat fertility and contraceptive implant use among Medicaid recipients in Colorado. *Fam Plann Perspect*. 1996;28:278–280.
These three papers demonstrate the power of long-term contraceptive agents for preventing repeat adolescent pregnancies.

8. Maynard R, Rangarajan A. Contraceptive use and repeat pregnancies among welfare-dependent teenage mothers. *Fam Plann Perspect* 1994;26:198–205.
This paper presents data that indicate that punitive mandates and welfare policies, which make the receipt of benefits contingent upon regular school attendance and participation in family planning workshops and vocational training programs, have not significantly reduced the rate of early subsequent childbearing among impoverished teenage mothers.

9. Dryfoos JG. A new strategy for preventing unintended teenage childbearing. *Fam Plann Perpect*. 1984;16:193–195.
Stevens-Simon C, Jeffrey I Dolgan, Kelly LS, Singer D. The Dollar-A-Day Program: An incentive program for preventing second adolescent pregnancies. *JAMA* 1997;277:977–982.
Stevens-Simon C, Kelly LS, Singer D, Nelligan D. Reasons for first teen pregnancies predict subsequent conceptions. *Pediatr.* 1998;101:electronic pages.
The data presented in these three papers support the thesis that teens need both the means and the motivation to prevent repeat pregnancies.

10. Luker K. Dubious Conceptions: *The Politics of Teenage Pregnancy*. Cambridge, Mass. Harvard University Press. 1996
This book addresses the misleading mythologies that surround teen pregnancy and the potentially disastrous welfare reforms they have spawned.

SECTION 7 AUDIO-VISUAL RESOURCES

1. Parents Too Soon. (12 minutes). This program describes the life of the teen parent and presents the ways in which parenthood changes the lives of teenagers. Available on loan.
   Contact: Shelly Lambert, Illinois Department of Public Health, 535 West Jefferson Street, Springfield, IL 62761, 217-782-0554.

2. Babies are People Too. 1986 (27 minutes). This program focuses on the relationship between teen mothers and their babies. It presents the difficulties of coping simultaneously with the tasks of being a teenager and a mother, and emphasizes the importance of the mother to her infant. $395.
   Contact: Churchill Media, 12210 Nebraska Avenue, Los Angeles, CA 90025, 800-334-7830.

3. The First Years: What to Expect. 1987 (19 minutes). This program covers the ways in which parent-child relationships affect the development of children during the first five years of life. $149.
   Contact: Films for the Humanities and Sciences, P.O. Box 2053, Princeton, NJ 08543, 800-257-5126.

4. Look Who's Balking. 1990 (15 minutes). An introduction to parenting for teenagers presented from the child's perspective—an unborn child refuses to be born until the parents agree to raise him right. $195.
   Contact: Pyramid Film and Video, P.O. Box 1048, Santa Monica, CA 90406, 800-421-2304.

5. Babies Having Babies. Produced by: CBS (1986)
   Teenagers come to grips with the choices they have made regarding sex, pregnancy and parenting.

SUBTOPIC 5

A COMMUNITY-ORIENTED PRIMARY CARE APPROACH TO ADOLESCENT PREGNANCY

Developed by Anthony L. Schlaff, M.D., M.P.H., Community-Oriented Primary Care Program, Carney Hospital, Dorchester, Massachusetts.

TIMELINE (60 minutes)

5 min	Introduction/Ice Breaker
5 min	Review of Objectives
50 min	Review of Case/Questions

If additional time is available and you wish to discuss evaluation, the second suggested activity can be added as a fourth question, requiring 15 to 20 minutes.

SECTION 1 LEARNING OBJECTIVES

Target Group: Nurse practitioners, physician assistants, certified nurse-midwives, medical students, and practicing clinicians.

By the end of the discussion, all participants should be able to:

1. Define qualitative and quantitative information related to community health.

2. Give a rationale for community involvement in planning and developing a health promotion program, and describe at least one method of creating such involvement.

3. Identify sources of qualitative and quantitative information that can be applied to a community-based needs assessment; give a rationale for using multiple sources and kinds of information.

4. Discuss options for interventions to reduce teenage pregnancy that could occur at various levels of social organization.

SECTION 2 CASE STUDY/DISCUSSION QUESTIONS

You are a family practitioner working at a community health center in an inner-city neighborhood of approximately 40,000 people. The community is relatively poor, with 25% of the population living below poverty level, though there is considerable gentrification. The area is mixed racially and ethnically. It is a young community, with 55% of the people under 30 and 35% under 18.

The health center provides comprehensive primary care, including prenatal care and family planning. Total visits to the health center are 45,000 per year. There are approximately 15,000 active patients (defined as those seen in the last year), 80% of whom come from the surrounding neighborhood. The health center provides prenatal care for 250 pregnancies per year. Seven percent are women under 18. Family planning services are provided to 1,000 patients per year, 70% of whom are under 25.

One of your responsibilities is to visit the local high school on a weekly basis to do exams and consult with the school nurse. The principal calls to request a meeting with you and the senior staff of the health center. She is concerned about the "alarming rate" of teen pregnancy in the community (70 pregnancies per 1,000 adolescent females aged 15 to 17) and its effect on the school. The principal informs you that in the past year, four students whom the faculty knew of had become pregnant. Two of the young women had dropped out; the other two were seeking to stay in school but parents of non-pregnant students are protesting. Although the principal conceded these were "small numbers," she noted the overall drop-out rate for the school over four years was 17%, and although slightly more of the drop-outs were male, she was concerned that many of the female drop-outs were doing so because of pregnancy. She asked if the health center was interested in working to reduce teen pregnancy in the community and whether there were any existing programs or ideas that the health center could offer to help. She would also like some help developing school policy regarding pregnant and parenting students so that pregnancy does not become synonymous with school failure and drop out.

You discuss teen pregnancy with the health center staff. Although most staff agree it is a problem in the community, most are not sure of the extent. The nurse practitioner who coordinates OB/GYN and family planning says, "Actually, fewer of our pregnancies are adolescents than I would have thought." Another senior staffer says, "I'm sure it's a bigger problem than we realize, but we're already doing everything we can. The family planning and contraceptives are free, and anyone can come here. It's not our fault if people just don't use them." One family planning counselor who lives in the neighborhood tells you, "There's a lot of kids out there who won't come in, but what are we going to do? The problems these kids face go beyond health care."

1. Do you and the health center have a role in addressing this issue? What responsibility do you have to teens living in the community who do not use the health center? What responsibilities do you have to pregnant students who wish to stay in school?

2. Who would you include in the decision making to identify the problem and establish an intervention to lower rates of teen pregnancy in the community? How would you seek their input, and what role would you ask them to play?

3. How might you and the community planning group begin to address the concerns raised by the school principal? How can you determine the extent of the problem of teen pregnancy in the community and the school? What information might lead to a decision to commit health center time and resources to working with the school on this problem?

4. After conducting a needs assessment, you and the community planning group substantiate the extremely high rate of teen pregnancy in the community, even though many teens do not view it as a problem. Surprisingly, a large number of teen pregnancies in the community are wanted. What types of intervention programs could you try, and what would you like to learn to better plan your intervention? What barriers might you face in trying to implement various interventions?

SECTION 3 SUGGESTED ANSWERS

1. *Do you and the health center have a role in addressing this issue? What responsibility do you have to teens living in the community who do not use the health center? What responsibilities do you have to pregnant students who wish to stay in school?*

   There are two fundamental steps in incorporating Community-Oriented Primary Care (COPC) into a practice: deciding to take responsibility for a defined population that extends beyond the individuals who present to the practice, and involving the community in studying and resolving the problems. The acceptance of such responsibility grows from personal attitudes toward the health care professional's role and from institutional mission. It requires commitment and the acquisition of knowledge and skills related to public health. COPC can enhance the quality of care within a practice and can increase professional satisfaction through collaboration with the community, but it requires a personal commitment that should not be taken lightly.

2. *Who would you include in the decision making to identify the problem and establish an intervention to lower rates of teen pregnancy in the community? How would you seek their input, and what role would you ask them to play?*

   COPC is a methodology for community health practice that stresses the involvement of the community in defining its health problems and designing and implementing interventions. There are multiple reasons for this involvement, a key one being the short feedback loop. In COPC, rather than relying on published data about a distant (although presumably comparable) population, practitioners can quickly use data about the population to be served in program design, implementation, and evaluation. Community involvement can provide access to the information that community members have about the determinants and potential solutions to the problem as it affects them. This is especially important for a community's minority and underserved populations because cultural sensitivity is an important element in community decision making.

   Community involvement has other advantages. Early involvement gives community members a sense of ownership of the project, which fosters good will and interest in participating. It advertises the project and increases the opportunities to reach community members who might otherwise not participate. Ideas that appear reasonable but will not work due to a variety of unanticipated obstacles particular to the community (such as holding a meeting at a site too far from public transportation or planning interventions not compatible with the cultural needs of the community), are more likely to be identified and forestalled by community members than professional program designers. Finally, the process of involving community members can foster a sense of empowerment that is in itself health promoting and may contribute to the community's ability to participate and have an impact on the problem being addressed.

Therefore, a teen pregnancy prevention program should involve multiple groups in problem identification, intervention design and implementation, and evaluation. Groups to consider include teens both in and out of school, parents, teachers, health center staff and other health professionals, local public health officials, political leaders, ministers, and other formal and informal community leaders.

3. *How might you and the community planning group begin to address the concerns raised by the school principal? How can you determine the extent of the problem of teen pregnancy in the community and the school? What information might lead to a decision to commit health center time and resources to working with the school on this problem?*

   Many types of information are available to help determine the extent of this or any other health problem. Both qualitative and quantitative information are important. Key qualitative information includes community perceptions of whether this is a significant problem, of its extent and relative importance, and of its causes. Both adult and teen perspectives are critical and can be assessed through surveys, interviews and focus groups. Health center users, teens in and out of school, community leaders, parents, faculty and health center staff may all have valuable perspectives.

   Quantitative data include data already collected and available that can be obtained relatively quickly and inexpensively; however, they may not give exact information about the population you are interested in serving. Some data, such as school or health center records and statistics, may give information about only a subsegment of the population. The low rates of teen pregnancy seen at the health center, for example, could reflect the true community rate or indicate that teens are going elsewhere for care related to pregnancy. Census data, hospital discharge data, and vital statistics (including birth certificates) may be available from state and local government agencies, but they may not exactly correspond to the community in which you are interested.

   Finally, although time-consuming and expensive, surveys can give precise and useful information about the defined community you are serving. Their advantages are that they can identify etiologic factors and potential interventions as well as the extent of the problem, and the data collected can be used in a formal evaluation of any intervention attempted. Student interns may assist in collecting and analyzing information.

4. *After conducting a needs assessment, you and the community planning group substantiate the extremely high rate of teen pregnancy in the community, even though many teens do not view it as a problem. Surprisingly, a large number of teen pregnancies in the community are wanted. What types of intervention programs could you try, and what would you like to learn to better plan your intervention? What barriers might you face in trying to implement various interventions?*

   Health promotion programs targeted toward changing human behavior require more than providing knowledge to allow "rational" choices. Multiple theories exist to explain why people do not always act according to health professionals' view of healthy behavior.

Attitudes, social and peer pressure, emotion, biologic drives, habit, convenience, competing priorities, and cultural and community norms can all affect how an individual behaves in choosing a "healthy" or "unhealthy" behavior. Efforts to influence behavior can therefore seek to change any of these determinants, from individual attitudes to social conditions.

The options for developing a program to reduce teen pregnancy are many. (See Subtopic 1, Overview, for differential diagnosis for noncontraception-using adolescents.) A key to developing an effective program is a better understanding of why adolescent women in this community want to have children. Familiarity with the literature exploring this issue is necessary, as is further interviewing and surveying of the women and teens in this particular community.

Based on a better understanding and on the particular circumstances, resources and skills available to this health center and community, interventions can be designed at one or more levels of social organization. Some examples of strategies to lower teen pregnancy rates include:

- Counseling programs to influence teens' understanding of the difficulties and dangers of early parenting
- Education counseling
- Outreach programs to encourage community use of the health center
- Community-based job training programs and mentor programs to increase the positive alternatives to early parenting
- Political action to change the financial incentives within the welfare system that encourage early parenting

These examples occur at different levels of social organization (the individual, the health center, the community and society, respectively) and can occur either in isolation or as part of a coordinated strategy. The chosen strategy (or strategies) must depend on the particular interests, abilities, resources, and analysis of the community and the health professionals serving it. Also important are the potential barriers one may face in attempting a particular intervention. Here again, the expertise of community members in knowing what will or will not work can be invaluable.

SECTION 4 ADDITIONAL ACTIVITIES

1. Role play a community meeting called jointly by the health center and high school to discuss the issue of teen pregnancy. Assign one or more members of the group to play the following roles: health center staff, high school faculty, high school student, teen mother, parent of a high school student, representative from the public health department, priest or minister, and local political leader. Have the group discuss whether teen pregnancy is a problem, how important it is, what causes it, what should be done, and what difficulties an intervention may encounter.

2. Assume you have designed an intervention program that focuses on influencing teen attitudes toward sexual activity, use of birth control, and desirability of early parenting. Identify what process, impact, and outcome measures you might follow to evaluate the effectiveness of your program.

SECTION 5 SUGGESTED READING

1. Mullan, F., Kalter, HD. Population-based and community-oriented approaches to preventive health care. *Am J Prev Med* 1988: supp 4(4): 141–154.
   This introduction to the theory and methods of community-oriented primary care stresses the model's importance as a bridge between public health and clinical approaches to disease prevention. The methodology of clinical epidemiology, with its short feed-back loop resulting in immediate action to address identified problems, is discussed in detail.

2. Marti-Costa, S., Serrano-Garcia, I. Needs assessment and community development: An ideological perspective. *Prevention in Human Services* 1983; 2(4): 75–88.
   A political analysis of needs-assessment techniques. This article reviews a variety of methodologies for assessing community need and argues that the methods used to define problems are not value-free; they affect which problems are identified and what solutions will be proposed.

3. Marsick, VJ., Designing Health Education Programs, in *The Handbook of Health Education,* Lazes, PM., ed. 1987, Gaithersburg, MD: Aspen Publishers, Inc.: 3–30.
   An overview of theory and methods in designing community-based health education programs that involve the targets of an intervention in the design of that intervention. The article stimulates thought on which approach to use and directs the reader to particular health intervention models.

4. McLeroy, KR., et al. An ecological perspective on health promotion programs. *Health Ed Q* 1988: 15(4): 351–377.
   This classic article presents an "ecological perspective" on health promotion interventions. This perspective allows for interventions simultaneously directed at several levels of social organization, including individuals, institutions, communities and society. The ecological perspective is a way to stimulate creativity and escape the dilemma of competing models (for example, individual "blame the victim" approaches versus societal "avoid personal responsibility" approaches).

5. Stevens-Simon, C, Boyle, C. Gravid students: Characteristics of nongravid classmates who react with positive and negative feelings about conception. *Arch Pediatric Adolesc Med*. 1995: 149:272–275.
   This article describes a study of a school-based clinic population to determine whether gravid classmates affect nongravid students' feelings about conception.